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INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA
يُؤْتِيهِمُ اللَّهُ مِنْ فَضْلِهِ يُشْرِكُ

THE MASHSHĀ'Ī PHILOSOPHICAL SYSTEM.
A STUDY, COMMENTARY ON AND TRANSLATION OF THE *HIDĀYAT AL-
ḤIKMAH* OF ATHĪR AL-DĪN AL-ABHARĪ

BY

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ABSTRACT

This study is a critical examination of the *Hidāyat al-Ḥikmah*, a philosophical manual composed by Athīr al-Dīn al-Mufaḍḍal ibn ‘Umar al-Abḥarī (d. 663H/1265CE). The book itself discusses the problems of classical Islamic philosophy, and consists of three main parts; Logic (*al-Mantiq*), Physics (*al-Ṭab‘iyyāt*), and Metaphysics (*al-Ilāhiyyāt*). The book also contains further explanations, referred to by al-Abḥarī as ‘guides’ (*hidāyah*), and a conclusion (*khātimah*). Although al-Abḥarī’s fame is most commonly associated with the logical and mathematical sciences, it is still a worthy effort to examine the present text to ascertain whether any ideas, doctrines, or theories discussed in the text are those of his predecessors or his own. Al-Abḥarī’s proficiency in logic is exhibited throughout the text, a mastery he deftly employs not only to put forth compelling arguments but also to support those arguments of his predecessors, Ibn Sīnā in particular.

Our purpose for studying this text therefore, is threefold:

- 1) A translation of this text into English in order that the text offer the student of thirteenth century philosophy greater access to works written in Arabic, and to open doors that would otherwise be inaccessible. A translation of this work also allows for a more objective discussion regarding the rendering of the technical language into English, and its interpretation.
- 2) A Commentary; in order that the more difficult concepts may be explained and understood in the context of Avicennan philosophy and contrasted with the opinions of the Theologians and the Greeks.
- 3) A legible copy of the text based in large part on the Dhaka edition, included for the benefit and utility of the reader.

As far as we are aware, the *Hidāyat al-Ḥikmah* has been published once in Arabic, together with an Urdu commentary written by Maulana Mumtāz al-Dīn Fāḍil al-Deobandī, in Dhaka (al-Ḥāj Mawlawī ‘Abd al-Karīm Ṣāhib-publisher, no date). This copy has been employed as the principle text for our study; however, for purposes of comparison and precision we are also employing two manuscripts obtained from the Central Library of the University of Cairo (no. 44717 on Metaphysics, and 22854 on both Physics and Metaphysics), and two microfilms from The Aya Sofya (AYS 2474, and AYS 4855- both on Physics and Metaphysics).

As far as we are aware, to date there has been no complete translation from Arabic into English on Avicennan Physics. Apart from being we believe, the only translated work of the *Hidāyat al-Ḥikmah* in its entirety, it will also be one of the first rendering’s into English of Avicennan Physics as developed by the Muslims. Furthermore, the *Hidāyat al-Ḥikmah* was an extremely popular and extraordinary work which was used as a textbook by the madrasah system for hundreds of years which repeats, supports, and complements the Avicennan philosophical system; this is surely an indication relative to its importance. Therefore, although the vast number of commentaries and supercommentaries have exposed the study of this book to the Arabic speaking milieu, the lack of a translation and critical edition of this book has hampered its proper study for English speaking scholars.

ملخص البحث

تتضمن هذه الدراسة على نقد تحليلي لكتاب هداية الحكمة و الذي يحتوي على جدول فلسفي تم اعداده أثير الدين المفضل ابن عمر الابهرى المتوفى سنة ٦٦٢ هجرية الموافق لسنة ١٢٦٥ ميلادية. و يهتم هذا الكتاب في قضايا الفلسفة الاسلامية المتعلقة بمواضع المنطق و الطبيعيات و الالهيات. بالاضافة الى ذلك يحتوي الكتاب على شروح مفصلة سميت من قبل الابهرى بالهداية و كذلك على خاتمة.

بالرغم من شهرة الابهرى و تفوقه في علوم المنطق و الالهيات ان لدراستنا هذه اهمية كبيرة و ذلك لمعرفة فيما اذا كانت هناك افكار و نظريات و آراء سبق و ان نوقشت من قبل علماء سبقوه. و عرف عن الابهرى بنباغته في علم المنطق و الذي استخدمه في استدلالية المناقشة و الدفاع عن آراء ممن سبقوه و خاصة ابن سينا.

و يتلخص الهدف من دراستنا هذه في ثلاثة جوانب:

١- تفسير الكتاب الى اللغة الانجليزية و لغرض اطلاع المختصين من الطلبة بفلسفة القرن الثالث عشر و خاصة عما كتب في مجال اللغة العربية. و مما لا شك فيه ان محاولتنا هذه ستؤدي الى توسيع نطاق النقاش و بسبب كونها ستفسح فرسة اكبر للعاملين باللغة الانجليزية من التعرف على بعض المصطلحات الفلسفية المهمة.

٢- لتزويد ممن لهم دراية بالمواضيع الفلسفية بشرح مفصل يتضمن على تعريفات مبسطة للمصطلحات الصعبة و التي استخدمها

ابن سينا في كتاباته لانتقاد آراء المختصين بعلوم الالاهيات و ما ورد عن علماء اليونان.

٢- نسخة منقحة من الكتاب و المطبوعة في دكا تم ضمها لهذه الاطروحة و لغرض منفعة الراغبين في الاطلاع.

حسب ما لدينا من معلومات ان كتاب هداية الحكمة كان قد طبع مرة واحدة في اللغة العربية مع شرح لمعانيه في اللغة الاردية قام بكتابته مولانا ممتاز الدين فاضل الديوبندي في دكا و نشر من قبل الحاج مولانا عبد الكريم صاحب و لكن بدون تاريخ يذكر لوقت نشره.

هذه الطبعة استخدمت كمصدر رئيسي لدراستنا و انه حرصا منا على الدقة و المقارنة فقد تم استخدام نسختين صورتين تم الحصول عليهما من مكتبة جامعة القاهرة المركزية. بالاضافة الى ذلك لقد حصلنا على ميكرو فلم من مكتبة آيا صوفيا في تركي.

و من المعلومات المتوفرة لدينا انه لحد الوقت الحاضر لا توجد ترجمة كاملة عن طبيعيات ابن سينا في اللغة الانجليزية و لذلك فان ترجمتنا الحالية لهداية الحكمة يمكن ان تكون اول ترجمة عن طبيعيات ابن سينا. و مما يستحق ذكره ايضاً ان هداية الحكمة من الكتب القيمة التي استخدمت لمئات السنين في الانظمة المدرسية و لكن بالرغم من كثرة الطباعات و التعليقات العديدة المتوفرة لقراء العربية فان عدم وجود طبعة جيدة من الكتاب في اللغة الانجليزية ادت الى قلة الاهتمام به من قبل المختصين في الانجليزية.

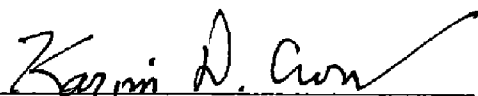
APPROVAL PAGE

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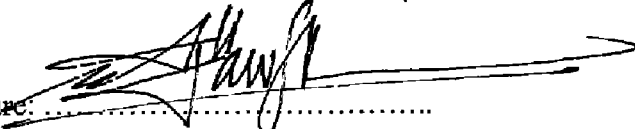
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DECLARATION

I hereby declare that this dissertation is the result of my own investigations, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

Name: SYED ALI TAWFIK AL-ATTAS

Signature: 

Date: 04.06.03

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ACKNOWLEDGEMENTS

The purpose of this study is to elucidate one of the more heretofore unknown works on thirteenth-century philosophical texts of the Avicennan genre entitled the *Hidāyat al-Ḥikmah* (Guide to Philosophy), composed by the prominent philosopher, logician, astronomer, and mathematician Athīr al-Dīn al-Mufaḍḍal ibn ‘Umar al-Abharī al-Samarqandī, more commonly referred to as al-Abharī (d. 663H/1265CE). Indeed one may preface by saying that the *Hidāyat al-Ḥikmah* shares some common features with the ‘*Uyūn al-Ḥikmah*’ composed by Ibn Sīnā in terms of matter, style, and intent. Both compositions share the feature of brevity, and the arrangement of the respective texts is almost identical. More importantly, it is possible that both works were intended for the same purpose. By comparing these similarities between the two compositions it is clear that al-Abharī was a student of the Avicennan tradition. Another point worthy of mention is that the *Hidāyah* shares a common feature in terms of intent with the *Isagogue* of Porphyry. The latter work, composed circa 270 CE. was the first treatise on logic employed as a textbook to be studied in the schools, a simplified much abridged introduction to the *Categories* of Aristotle. Similarly the *Hidāyah* is a condensed, simplified version of the philosophy of Ibn Sīnā, probably intended for use in the *madrasah* system. Authenticity of the latter statement cannot be confirmed however, hence our hesitation to state outright that it was in fact used as a textbook. However, based on our careful examination of the work and a comparison with another work composed by al-Abharī, namely his *Īsāghūjī fi’l Mantiq*, we are justified in making such a bold supposition.

In this study we examine the *Hidāyat al-Ḥikmah* in three main parts. The introduction, follows a deliberate course; one that is intended first to familiarize the reader with key concepts integral to understanding what ‘Islamic science’ is, and how it

relates to the worldview of Islām. In addition, the intellectual milieu surrounding the period before the author was born is woven into a sketch of his life and works. Information about his life is largely vacuous. Therefore we have reconstructed, based largely on reasonable logical deductive methods, what we believe to be a near accurate depiction of his life. The first part comprising five chapters constitutes the main body of our analysis of and commentary upon the fundamental points and ideas of the *Hidāyat al-Hikmah*. We have taken liberty not to discuss *every* problem discussed by the author opting instead to discuss only those topics relevant to his system. The second part is the English translation of the *Hidāyat al-Hikmah* in its entirety comprising forty-seven brief chapters. The third part is a legible copy of the Arabic text of the *Hidāyah* based in large part on the Dhaka edition, included for the benefit and utility of the reader.

This work is the fruit of research done at the International Institute of Islamic Thought and Civilization (ISTAC), in partial fulfillment for my Ph.D. It is therefore not only an honour but incumbent upon me to express my profound gratitude and humble appreciation to my distinguished father, Professor Dr. Syed Muhammad Naguib al-Attas, Founder-Director of the International Institute of Islamic Thought and Civilization. It is to him that I owe the largest portion of gratitude for his wisdom, genius, guidance both spiritual and academic, courage, and above all his patience. It is he who can truly claim responsibility for my exposure to the adventurous enigmatic world of philosophical thought. He has perhaps been the one most eager to see the results of his many years of dedication. Many times he expressed paternal concern for me for what he perceived to be my apparent apathetical approach, perhaps this work will allay those concerns. May Allah bless him and admit him to the ample gardens of His paradise.

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ISTAC continued even after he accepted the post of Dean to the College of Arts and Sciences at Fatih University in Istanbul. I am honored that he has allowed our professional relationship to embrace the kinship of brotherhood.

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Above all, I am eternally indebted to my wife and children for their undying love, unwavering support, patience, encouragement, and understanding throughout the many

trials and tribulations during the most challenging of times. May Allah increase their resolve and grant them true happiness both in this world and in the next.

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GLOSSARY OF TERMS

‘A

- Abadiyyat al-‘Uqûl*: The Eternity-without-End of Intellects
Ubuwwah: Paternity
Ittişâl: Continuity
Ittifâqiyyah: Coincidental
Ajrâm Samâwiyyah: Heavenly Bodies
Aḥād: Individual Beings
‘Akhaṣṣ Muṭlaq: Absolute Peculiarity
Irādah: Will
Azaliyyat al-‘Uqûl: The Pre-Eternity of Intellects
al-Istiqrā’ al-ḡayr al-Tāmm: Incomplete Induction
Idāfah: Relation
‘A‘amm Muṭlaq: Absolute Generality
‘Ayn: Place
Iftirād: Supposition
Aflāk: Celestial Spheres
 Falak A‘zam: The Highest Celestial Sphere
 Falak Qamar: The Celestial Sphere of the Moon
Alam: Pain
Itizām: Entailment
Itiyām: Composition
Amārah: Implication
Imtinā’ Dhātī: Essential Impossibility
Imkān: Potency, Possibility
 Imkān Dhātī: Essential Possibility
‘Inshāiyyāt: Constructions
Infi‘āl: Passion
Awwalan: A Priori
Awwaliyyāt: Axioms

B

- Badihī*: Intuitive, Self-Evident
Bukhār: Vapor
Barq: Lightning
Burhān: Demonstration
 al-Burhān al-Innī: Quia-Proof Demonstration
 al-Burhān al-Limī: Propter-Proof Demonstration
Basīṭ: Simple
 Basā’it al-‘Unṣuriyyāt: Simple Elements
Bā’ithah: The Stimulative Faculty
Ba‘īd: Remote
Billaur: Crystal
Bunūwah: Filiation
Bayāḍ: Whiteness

T

- Tālī*: Antecedent
Takhalkhul: Rarefaction
Taṣawwur: Conceptive Knowledge
Taṣdiq: Declarative Knowledge

Taḍammun: Implication
Taḍāyuf: Mutual Correlation
Ta'āqub: Successive
Talāzun: Implications
Tamthil: Analogy
Tanāsukh: Transmigration of Souls
Tanāqud: Contradiction
Tawhīd: Oneness

J

Jadal: Dialectic Argument
al-Juz' alladhī lā Yatajazza': The Indivisible Particle
'Ajzā' Mutashābihah: Homogeneous Parts
Juz'ī: Particular
Juzī al-Ḥaqīqī: Veritable Particular
Juzī al-Idāfī: Relative Particular
Juz'iyyah Musawwarah: Quantificational Particular Proposition
Jism: Body
Jismiyyah: Corporeality
Jism Kuriyy: Spherical Body
Ajsām Ma'daniyyah: Mineral Bodies
Ajsām Arḍiyyah: Earthly Bodies
Jāmi': Comprehensive
Jins: Genus
Jins al-Ajnās: Genus of Genera
Jihah: Mode, Aspect
Jawād: Munificent Provider, God
Jawhar: Substance

Ḥ

Hādith: Originated
Muḥdath bi'l Dhāt: That which is Originated in Essence
Muḥdath bi'l-Zamān: That which is Originated in Time
Hāfīzah: The Retentive Faculty
Hadiyyāt: Intuitive Propositions
Hadd: Definition
Hadd Ismī: Veritable Nominal
Hadd Aṣḡar: Minor Term
Hadd Akbar: Major Term
Hadd Awsaṭ: Middle Term
Hadd Tāmm: Complete Definition
Hadd Ḥaqīqī: Veritable Definition
Hadd Nāqis: Incomplete Definition
Harakah: Motion
Harakah fi'l-Kamm: Motion in Quantity
Harakah fi'l-Kaif: Motion in Quality
Harakah fi'l-Waḍ': Motion in Position
Harakāt Samāwiyyah: Heavenly Motions
Harakāt Muḥdathah: Originated Motion
Harakah Ṭabi'iyyah: Natural Motion
Harakah Qasriyyah: Coercive Motion
Harakah Irādiyyah: Voluntary Motion
Harakah Mustaqīmah: Linear Motion

Ḥarakah Mustadīrah: Circular Motion
Ḥarakah Ḥāfiẓah li'l-Zamān: Continuous Movement in Time
Muḥarrik Ghayr Jismiyyah: Non-Corporeal Mover
Muḥarrik Qarīb: Proximate Mover
al-Ḥiss al-Mushtarak: Common Sense
Hawās Bātinah: Internal Senses
Hawās Zāhirah: External Senses
al-Ḥaqq al-Awwal: The First Real Being [God]
Ḥaqīqah: Verity, Reality, Essence
Ḥāll: Dweller, That which Inheres
Hālah: A Halo
Ḥālat Munāfirah: A State of Incompatibility
Ḥālat Mulā'imah: A State of Compatibility
Ḥamliyyah: Categorical Proposition
Ḥammiyyah: Propriety
Hay'ah Qārrah: Complete Condition
Hay'ah Ghayr Qārrah: Incomplete Condition
Hayz Tabī'ī: Natural Place
Hayūlā: Prime Matter
Hayūlā 'Unṣuriyyah: Elemental Prime Matter

Kh

Khārij: External Reality
Khiṭābah: Rhetoric
Khalā': Void
Khayāl: The Imaginative Faculty

D

Dukhān: Smoke
Dāll: Indicans
Dalālah: Denotation
al-Dalālah al-Lafziyyah al-Waḍ'iyyah: Conventional Verbal Denotation
Dalīl: Proof, in the general sense
Dalīl Iqnā'ī: Persuasive Argument
Dalīl Burhānī: Demonstrative Proof
Dā'im: Perpetual
Dā'imat Muṭlaqah: Absolute Perpetual Propositions

Dh

Dhāt: Essence
Dhātī: Essential
Dhubūl: Diminution
Dhihn: The Mind

R

Rāsikhah: Permanent
Rasm: Description
Rasm Ismī: Descriptive Nominal
Rasm Ḥaqīqī: Veritable Description
Raṣās: Lead
Ra'd: Thunder
Riqqah: Sympathy
Riyāḥ: Wind

Z

Zāj: Vitriol
Zarnīkh: Arsenic
Zalzalah: Earthquake
Zamānī: Temporal
Zawjiyyah: Evenness
Zaybaq: Mercury

S

Sāfil: Lower
Sālibat Kullīyyah: Universal Negative
Saṭḥ: Surface
 Saṭḥ Bātin: Interior Surface
 Saṭḥ Zāhir: Exterior Surface
Siḥāb Māṭir: A Cloud that produces Rain
Safsatah: Sophistry
Sukūn: Being at Rest
Sumūm Muḥriq: Burning Hot Wind
Sawād: Blackness
Sūr: Quantifier
Sharṭiyyah: Compound Proposition
 Sharṭiyyah Muttaṣilah: Conjunctive Proposition
 Sharṭiyyah Munfaṣilah: Disjunctive Proposition
Shi'r: Poetry
Shakl: Figure, Shape
Shuhub: Shooting Stars
Shay' Taṣawwuri: A Conceptual Thing

Ş

Şā'iqah: Thunderbolts
Şariḥ: Clarity
Surriha: Explicit
Şurah: Form
 Şurah Mustalzimah: Form Necessitating Magnitude
 Şurah Jismiyyah: Corporeal Form
 Şurah Kā'inah: Generated Form
Şaqī': Frost

D

Dabāb: Fog
Diddān: Contraries
Darb: Mood
 Durūb al-Muntajih: Conclusive Moods
Darūriyyat Muṭlaqah: Absolute Necessary Propositions

T

Tab'iyyāt: Physics
 Tabi'ah Miqdāriyyah: Magnitudinal Nature
Tibqah Bāridah: Cold Stratum
Tall: Dew

Z

Zann: Conjecture, Opinion

‘A

- ‘*Ādāt*: Convention, Habits
 ‘*Ālam Jusmānī*: The Physical World, The Corporeal World
 ‘*Ālam Qudsī*: The Sacred World
 ‘*Ālī*: Sublime, Higher
 ‘*Adam*: Privation
 ‘*Aradī*: Accidental
 ‘*Arad ‘Ām*: General Accident
 ‘*Arad Lāzim*: Concomitant Accident
 ‘*Arad Mufāriq*: Seperable Accident
 ‘*Arad Khāṣṣah*: Property
 A‘rād Mutadāddah: Contrary Accidents
 ‘*Urfiyyat ‘Āmmah*: General Conventional Proposition
 ‘*Urfiyyat Khāṣṣah*: Special Conventional Proposition
 ‘*Aql*: Intellect
 ‘*Aql Awwal*: The First Intellect
 ‘*Aql Thānī*: The Second Intellect
 ‘*Aql Fa‘āl*: The Active Intellect
 ‘*Aql bi‘l Fi‘l*: The Intellect in Act
 ‘*Aqliyyah*: Rational
 ‘*Uqūl Mujarradah*: Immaterial Intellects
 ‘*Aql Maḥd*: Pure Intellect
 ‘*Aql Mustafād*: The Acquired Intellect
 ‘*Aql Muṭlaq*: The Absolute Intellect
 ‘*Aql Mufāriq*: The Separate Intellect
 ‘*Aql bi‘l Malakah*: The Intellectus “In Habitus”
 ‘*Aql Hayūlānī*: The Material Intellect
 ‘*Aks*: Conversion
 ‘*Aks al-Mustawī*: Entailments
 ‘*Ilm*: Knowledge
 al-‘Ulūm al-Ḥaqīqiyyah: The Actual Sciences
 ‘*Illah*: Cause
 ‘*Illīyyah*: Causality
 ‘*Illat Māddiyyah*: Material Cause
 ‘*Illat Şūriyyah*: Formal Cause
 ‘*Illat Fā‘iliyyah*: Efficient Cause
 ‘*Illat Ghā‘iyyah*: Final Cause
 ‘*Illah Mūjidah*: The Cause that brings a thing into Existence
 ‘*Inādiyyah*: Antagonistic
 ‘*Ayn al-Kayfiyyah*: Identity of the Quality

Gh

- Ghayr Rāsikhah*: Transitory
Ghayr Mutanāhiyah: Infinite
Ghayr Munqaṭi‘ah: Continuous

F

- Fardiyyah*: Oddness
Farasiyyah: Horseness
Fasād: Corruption
Faṣl: Differentia
 Faṣl Qarīb: Proximate Difference

Faṣl Ba'īd: Remote Difference
Fi'l: Actuality, Action
Fayyād Mudīr: Governing Emanator

Q

Qā'im Binafsihi: Self-Subsistent, i.e. Immaterial
Qadīm: Eternal
 Qadīm bi'l Dhāt: That which is Eternal in Essence
 Qadīm bi'l-Zamān: That which is Eternal in Time
Qarīb: Proximate
Qaḍīyyah: Proposition
Qawsu Quzaha: A Rainbow
Qawl al-Shāriḥ: Explanatory Phrase
Quwwah: Potentiality
 Quwwah Shahwāniyyah: The Appetitive Faculty
 Quwwah 'Āqilah: Intellective Faculty
 Quwwah 'Āmilah: Practical Faculty
 Quwwah Ghādhīyyah: The Nutritive Faculty
 Quwwah Ghaḍabiyyah: The Faculty of Irascibility
 Quwwah Qudsiyyah: The Sacred Faculty
 Quwwah Muḥarrikah: Motive Power
 Quwwah Muwallidah: The Reproductive Faculty
 Quwwah Mailiyyah: Inclined Force
 Quwwah Nāmiyyah: The Faculty of Growth
Qiyās: Syllogism
 Qiyās Isthithnā'ī: Repetitive Syllogism
 Qiyās Iqtirānī: Categorical Syllogism
 Qiyās Khulf: *Reductio ad Absurdum*, or Dialectical Argument
 Qiyās Murakkab: Polysyllogism

K

Kā'ināt al-Jaww: Atmospheric Phenomena
Kā'ināt al-'Unṣuriyyah: Elemental Beings
Kibrīt: Sulfur
Kullī: Universal
Kamāl: Perfection
 Kamāl Awwal: The First Entelechy, or the First Perfection
Kamm: Quantity
 Kamm Munfaṣil: Discrete Quantity
 Kamm Muttaṣil Qārr al-Dhāt: Unchanging Continuous Quantity
 Kamm Muttaṣil Ghayr Qārr al-Dhāt: Ever-Changing Continuous Quantity
Kawn: Generation
Kaif: Quality
 Kaifiyyāt Maḥsūṣah: Sensible Qualities
 Kaifiyyāt Nafsāniyyah: Qualities of the Soul
 Kaifiyyāt Isti'dādiyyah: Qualities of Capacity
 Kaifiyyāt Mukhtaṣṣah bi'l- Kammīyyāt: Quantitative Qualities

L

Lāzim: Concomitant
Ladhdhah: Pleasure
Luzūmiyyah: Cogent
Lafziyyah: Verbal

M

- Māni'*: Exclusive, Preventive
Māni'at al-Jam': Incompatible
Māni'at al-Khuluw: Totally Exclusive
Māhiyyah: Quiddity, 'What-ness'
Māhiyyah Baṣīṭah: Simple Quiddity
Mabḍā' Awwal: First Principle
Matā: Time
Muta'akhhir: That which is Posterior
Mutabāyin: Heterogeneous
Mutasāwin: Coextensive
Mutaṣarrifah: The Cogitative Faculty
Mutaḍāyifān: Correlatives
Mutaqābilān bi'l-Ījāb wa'l-Salb: Opposed in terms of Affirmation and Negation
Mutaqaddim: That which is Prior
Mutaqaddim bi'l-Rutbah: That which is Prior in Rank
Mutaqaddim bi'l-Zamān: That which is Prior in Time
Mutaqaddim bi'l-Sharf: That which is Prior in Excellence
Mutaqaddim bi'l-Tab'a: That which is Prior by Nature
Mutaqaddim bi'l-'Illiyah: That which is Prior through Causality
Mutanāhiyah: Finite
Mutawātarāt: Testimonial Propositions
Muthallathiyyah: Triangularity
Majāz: Metaphor
Mujarrabāt: Empirical Propositions
Muḥaqqiqūn: Scrutinizers
Maḥall: Substratum, That in which the Dweller Inheres
Maḥsūrāt: Quantificational Propositions
Muṭṭarid: Uniform
Maḥmūl: Predicate
Mudrik: Perceiver
Madlūl: The Thing Proven
Murabba'iyyah: Rectangularity
Murajjih: Preponderating Principle
Murakkab: Compound term
Murīd: Willer
Mushāhadāt: Conventional Propositions
Mashrūṭat Khāṣṣah: Special Conditioned Propositions
Mashrūṭat 'Āmmah: General Conditioned Proposition
Mushāghabah: Contentious Disputation
Muṭābaqah: Correspondence
Muṭlaqat 'Āmmah: General Absolute Proposition
Maẓnūnāt: Presumptions
Ma'dūlat al-Maḥmūl: Privative of the Predicate
Mu'arriḥ: Definiens
Ma'lūl: Effect
Ma'nā Ma'qūl: Intelligible Meaning
Mughālatah: Fallacy
Mufrad: Simple term
Muqārin al-Ḥudūd: The Relation of Terms
Miqdār: Magnitude
Muqaddam: Antecedent

Muqaddimāt Yaqīniyyah: Propositions of Certainty
Muqaddimāt Mukhayyalāt: Imaginative Premisses
Maqūlāt al-‘Asharah: The Ten Aristotelian categories
Malā’ Mutashābih: Homogeneous Plenum
Milk: Possession
Mumkināt: Contingents
 Mumkinat Khāṣṣah: Particular Possible Propositions
 Mumkinat ‘Ammah: General Possible Proposition
Muntashirah: Dispersed
 Muntashirat Muṭlaqah: Absolute Dispersed Proposition
Mantiq: Logic
Mun‘akis: Reflexive
Muwajjahāt: Modal Propositions
Mūjibat Juz‘iyyah: Particular Affirmative
Mūjibat Kulliyyah: Universal Affirmative
Mawḍū’: Subject
Mu‘aththir: That which acts upon something, The Actuating Principle

N

Natijah: Conclusion
 Mafṣūl al-Natā’ij: Separate Conclusion
 Mawṣūl al-Natā’ij: Connected Conclusion
Nazari: Deductive, Theoretical
Nazm Tabi’i: Natural Order
Nafs: Soul
 Nafs Hayawāniyyah: The Animal Soul
 Nafs Nabātiyyah: The Vegetative Soul
 Nafs Nātiqah: The Rational Soul
 Nufūs Falakiyyah: Celestial Souls
 Nufūs Nātiqah Sādhajah: Pristine Rational Souls
Numūw: Growth
Naw’: Species
 Naw’ al-Anwā’: Species of Species
 Naw’ Haqīqī: Veritable Species
Nūshādir: Ammonia

W

Wujūd: Existence, Being
 Wājib al-Wujūd: The Necessarily Existent Being
 Wujūd ‘Ainī: Concrete/Real Existence
 Wujūdiyyat Lā Dā’imah: not-Necessary Perpetual
 Wujūdiyyat Lā Darūriyyah: not-Necessary Existential
Wad’: Position
 Wad’iyyah: Convention, Also refers to Positivism as a Philosophical position
Waqtiyyah: Temporal
 Waqtiyyat Muṭlaqah: Absolute Temporal Propositions
Wahm: The Estimative Faculty
 Wahmiyyāt Kādhibah: False Imagined Premisses

Y

Yashm: Jade
Yaqīniyyāt: Propositions based on Certitude, Certainties

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PART I

HISTORICAL AND TEXTUAL STUDY OF THE
HIDĀYAT AL-ḤIKMAH

INTRODUCTION

A. CONCEPTUAL BACKGROUND

If one were to examine the activities of the past to which one commonly refers to as philosophy, it is possible to classify all such activities as attempts to apprehend a conceptual understanding of the universe within a system. Therefore, if one were to think of philosophy as a science comprising a study of these systems it would necessarily define philosophy as a science of systems. If one were to take into consideration the fact that there are activities within the study of philosophy which are not directed towards the establishment of systems, activities acute to the evaluation of particular problems within a given system, then the definition of philosophy has to be the science which discusses systems and system related inquiry. The framework for evaluating the process through which philosophy develops into a science as a discipline lends insight into how philosophy evolves in a given society. This clarification also assumes that the rise of a civilization coincides with the rise of scientific and philosophical activity.

In order to propose a theoretical framework for the rise of a civilization one would have to examine that civilization until the rise of sciences and philosophical activities become evident. The scientific and philosophical activities are particular to each civilization; differences in each arise as considerations pertaining to culture and periodization, however the unifying element among civilizations is the framework through which is found the explanation for the rise of philosophy and science in that civilization. A worldview, understood in this context to mean the principle formulations dictating life, enacts a certain dynamism that may begin at the social sphere culminating in a dissemination into all aspects of life. The causes for this dynamism vary greatly among civilizations. However in general, it is a moral struggle engraved in the very nature of man which in turn motivates society to this conflict. This physical moral

struggle leads to a justification of morality through intellectual dynamism and gradually a tradition will be established which will in turn lead to the establishment of a civilization.

It is clear from this very abstract framework that the “rise” and “decline” of a civilization is dependant upon this intellectual dynamism punctuated by philosophy and philosophical thought. With more and more intellectual ideas coming into being, so too an accumulation of knowledge. This leads to an inevitable shift with regard to certain conceptions of the mind. Out of this certain fundamentals are questioned and their solutions give rise to yet more inquiry until conclusions are reached that point to the importance of intellectual endeavor and the establishment of schools. Such circles of scholarly activity are necessary, because in order for scientific and philosophical activities to become institutionalized a tradition is required. This tradition then becomes an integral part of society. This framework, though abstract, can be generally described as the antecedent by which the Western and to a certain extent the Greek civilizations emerged. Differences, however, become apparent when comparisons between their respective worldviews are analyzed.

One can say that the Greek worldview in particular developed out of a natural worldview, one where simplistic notions of the world dealing only with phenomenal occurrences were viewed as the underlying principles of being and man's purpose as a whole. As such, it was the culture that determined the direction of the worldview so that throughout its history, that worldview may be perfected and molded accordingly. Were the origins of Greek philosophy born of necessity, out of an overwhelming curiosity to explain how things are? If one were to accept this to be factual, it is not possible to explain why the study of the nature of things be assigned exclusively to the Greeks. If one were to argue that although the study of nature was carried out by other peoples as well, but that somehow the Greeks were the only ones who studied the nature of things in such a way that it gradually led to the development of sciences, one can reasonably infer that

there must have been at least two ways utilised for the study of nature. Firstly, a 'scientific' study that led to the emergence of the sciences; and secondly, one that did not lead to the emergence of any sciences, but occurred merely out of man's inherent curiosity to know. However this explanation is superfluous as far as method is concerned, and therefore a further elucidation justifying the exclusivity of Greek scholasticism is warranted. Therefore it is possible, based on the premise that a moral dynamism which found its genesis in the social sphere culminating in the intellectual sphere, that long before the acclaimed first philosopher Thales, there were activities influenced by an intellectual environment that led to his 'scientific' or 'natural' studies. Based upon this premise, it is theorised that the moral dynamism referred to may have had its roots in mythological epics. The romance of these epics contain, apart from the more obvious literal inferences, allegorical suppositions of morality and of man's struggle with his self, and of temptation and will, orchestrated by a pantheon of gods. Being triumphant over the gods inhabiting nature meant therefore, that man alone would dictate his destiny in which case freedom could be achieved.

In general, one may postulate the Western worldview to have developed historically. What we mean is that the worldview is shaped by a series of successive intellectual traditions each typified by the ideological milieu derived, as cogently clarified by Professor al-Attas, "from cultural and philosophical elements aided by the science of their times".¹ Therefore, the fundamental elements of such a worldview are necessarily impermanent, dependant upon the persistent formulation of new ideologies. Consequently, the worldview is in a constant state of 'becoming', never actually achieving maturity and therefore cannot, in the words of Professor al-Attas, be "conscious

¹ Syed Muhammad Naguib al-Attas, *Prolegomena to the Metaphysics of Islām. An Exposition of the Fundamental Elements of the Worldview of Islām*, (Kuala Lumpur: International Institute of Islamic Thought and Civilization (ISTAC), 1995), 4. Henceforth cited as *Prolegomena*.

of its own identity".² In truth it was the appearance of Islām that guided the West away from its intellectual wasteland causing revolutionary changes which would leave a permanent imprint not only on Christianity, by allowing it to assume the guise of a 'revealed' religion, but also on the different schools of thought which would then participate in the shaping of its worldview.³

Indeed Aristotelianism, or rationalism, would become the ideological premise upon which subsequent ideologies were formulated. This adoption in itself was revolutionary, not so much because it led to the systematic establishment of schools dedicated to scholarly inquiry instrumental in the shaping of Western history leading to the dramatically familiar 'revolution' in the sciences, but more because it threatened radical changes fundamental to the established foundations of Christianity. How to reconcile the problems between reason and revelation, the One and the many, of movement and change, the Word and the laws of Nature, were problems aimed at the very core of religion. Their solutions founded with the aid of rationalism presented itself in the form of the theory of twofold truths, permanently establishing a dichotomy between the sacred and the profane. The most conspicuous problem resulting from this dichotomy however, is the problem of knowledge because a conviction resulting from one could form a necessary preliminary attack on the other.

From this brief assertion it becomes clear that the Greek and Western worldviews "formed gradually through a historical and developmental process of philosophical speculation and scientific discovery",⁴ one in which man occupies a central position. This is not the case however from the perspective of the worldview of Islām.⁵

² Ibid , 4.

³ For a detailed exposition on the roots of Western intellectualism and the corruption of the term 'revealed' as applied to Christianity, please see Syed Muhammad Naguib al-Attas, *Islām and Secularism*, (Kuala Lumpur: International Institute of Islamic Thought and Civilization (ISTAC), 1993). Henceforth cited as *Islām and Secularism*.

⁴ *Prolegomena*, 2.

Unlike the Greek and Western worldviews, the worldview of Islām is not one born out of culture, or social dilemma; conversely it is the worldview that determines and gives rise to culture, and consequently civilization. Nor is it founded upon a dynamism punctuated by “philosophical speculation formulated mainly from observation of the data of sensible experience, of what is visible to the eye; nor is it restricted to *kawn*, which is the world of sensible experience, the world of created things”.⁶ It is not one where the foundations for its worldview are deeply rooted in the rise of the sciences, whose premises are based solely on an immersion with the phenomenal world, its fate at the mercy of ideological paradigms,⁷ nor is it receptive of the dichotomy between the sacred and the profane, or described by historical periodization. “What is meant by ‘worldview’ according to the perspective of Islām, is then the *vision of reality and truth* that appears before our mind’s eye revealing what existence is all about; for it is the world of existence in its totality that Islām is projecting”.⁸ The source for this vision of reality and truth is Revelation which projects the fundamental elements of the worldview; elements whose knowledge is based on certainty.⁹ We have already made a general reference with regard to the rise of the sciences in the preceding paragraphs when we referred to both the Greek and Western conceptions of worldview and the subsequent rise of the sciences. We have mentioned that it resulted from man’s overwhelming desire to know primarily about God,

⁵ There is a distinction to be made here with regard to the terms “Islamic worldview” and “the worldview of Islām”. The former pertains more to the idea of intellectual ideologies or ontological systems conducted under the banner of Islām. These ideologies or ontological systems are then receptive of change. The worldview of Islām however is such that its fundamental elements are immutable because they are based on Revelation.

⁶ Ibid, 1.

⁷ We are referring to the Kuhnian interpretation of paradigm and paradigm shift. See *The Structure of Scientific Revolutions*, Thomas S. Kuhn, (Chicago: The University of Chicago Press, 1970), 2nd ed. Here Kuhn proposes that while the passage of science is largely influenced by the nonrational and a preponderance of a certain intellectual ideology supported by concomitant methodology, which give rise to more complex theories than those preceding them, these new theories however, are not representative of being any closer to the truth as viewed rationally. It is these new more complex theories that are representative of paradigms.

⁸ *Prolegomena*, 2.

⁹ For a complete definition and understanding of the reference to the term certainty (*yaqīn*), see Syed Muhammad Naguib al-Attas, *Islām and Secularism*, 86, 135 n 112.

His creation, existence, the nature of the soul and so forth, and then to explain how things are. Since we maintain that both the Greek and Western worldviews deny Revealed knowledge, logically then there are no fundamental elements as such and therefore, this explanation assumes that man's inquiry proceeds from what he does not know and then tries to explain the unknown employing empirical methods and aided by reason alone. However, the arrival of knowledge of the Absolute cannot be attained through reason alone and consequently certainty is in doubt. This doubt is receptive of speculation. Prior knowledge then becomes suspect while new theories and ideas are formulated resulting in new knowledge which in turn admits doubt. Hence, knowledge which is not impregnable to doubt cannot therefore constitute certitude. From this assertion it becomes immediately clear that the worldview of Islām does not suffer from the problem of knowledge. Revelation does not stand in opposition to the faculty of reason, nor is reason incapable of grasping the truths of Revelation. Indeed, the fundamental elements projected by Revelation and aided by the interpretations and demonstrations of the Prophet reveals the essence of Islamic sciences.

The pervading opinion dominating Western sciences is that the Islamic sciences in general are nothing more than perhaps a continuation of the Greek sciences and that Muslim philosophers mere transmitters of earlier Greek masters. This opinion assumes that Islamic sciences developed independently of revealed knowledge and that Muslim philosophers had nothing new to offer nor did they contribute to "revolutionary" thought. This opinion further assumes that such a thing referred to as Islamic sciences did not and could not exist, which would then lead one to conclude that the intellectual milieu was one of stagnancy and incapacity. Factual evidence for this and other deriding opinions concerning Muslim achievements does not exist. The immutable axis of revealed doctrine, not to mention intuitive knowledge confirmed by revelation, certainly bisected the Greek civilization. Therefore the resemblance between Greek and Muslim sciences

cannot be assumed to be purely a complete adoption of the former by the latter.¹⁰ Hence, the supposition that Muslim masters borrowed everything from the Greeks is erroneous, although we agree that they did borrow some wisdom from the Ancient philosophies. The following *ḥadīth* of the Prophet Muḥammad (peace be upon him) is a true testimony to the ability of Islām to borrow from other civilizations, if the knowledge contained therein does not run counter to the truths demonstrated by Islām:

Abū Hurairah (Allah be pleased with him) reported Allah's messenger (pbuh) as saying: a word of wisdom is the lost property of a believer, he can take it wherever he finds it, because he is more entitled to it.¹¹

In addition, if certain elements within the Greek philosophical system were understood by Muslims to be antithetical and in opposition to the fundamental elements of the worldview of Islām, these elements were either discarded or were transformed by the application of religious philosophy (*kalām*) in order that those ideas conform to distinctive principles within the fundamental elements of the worldview of Islām.¹² Conversely, if one were to assume the supposition to be true, what then defines science as understood in Islām? What element differentiates it from the Greek sciences? What is it that makes it distinct?

The centuries prior to the appearance of Athīr al-Dīn al-Mufaḍḍal ibn 'Umar al-Abharī al-Samarqandī (d. 663/1265), accompanied by the intellectual zest and material splendor of the Muslim world, produced a corpus of philosophical and scientific knowledge which was to leave a permanent seal upon Western civilization more than any

¹⁰ See also Titus Burckhardt, *Mirror of the Intellect*, (Albany: State University of New York Press, 1987), 18-19.

¹¹ Sunan al-Tirmidhī, *Kitāb al-'Ilm, al-Kutub al-Sittah wa Shurūḥuhā*, bāb 19, ḥadīth 2687 (Istanbul: Cagri, 1992).

¹² These ideas are briefly discussed by Cemil Akdoğan, "Muslim Influence upon European Scholarship and Learning", (*Al-Shajarah*, Journal of the International Institute of Islamic Thought and Civilization (ISTAC), 2001), v 6, n.2, 161-196. See also Alnoor Dhanani, *Muslim Philosophy and The Sciences*, (*The Muslim Almanac*, New York: Gale Research Inc., 1996), 190.

other civilization before or since. The pivotal dilemma facing the Muslim philosophers before the appearance of al-Abharī was how to reconcile God's absolute unity and perfection with the multiplicity of creation without postulating a duality in Him. These same problems confounded the Greeks from Aristotle to Plotinus. Although Muslim philosophers accepted many of the Aristotelian postulates giving them due acknowledgement, they did not develop them merely as continuations from Greek thought devoid of new ideas expressed in the same doctrinal manner of the *Logos* or *Nous* in order to succumb to the demands of logical reasoning alone. On the contrary, new ideas and interpretations were afforded which both satisfied the demands of reason and did not violate the teachings of the Qur'ān. In this regard, Muslim philosophers managed to formulate a new system quite distinct from that of their Greek predecessors.

In addition, the language of the Qur'ān and its message had now enriched the language of philosophy. For example, logic derived essentially from Aristotle was of a nature described by the Ten Categories in which substance was the definitive reality of existence. It was unable to prove the truths pertaining to God or the machinations of the First Cause. Aristotelian philosophy could not then prove the unity of God, His Oneness, and had no conception of His attributes. Solutions to these problems were developed in part by Muslim philosophy and answered by the worldview of Islām. We have already mentioned that the genesis of Islamic sciences resulted from inquiry into the fundamental elements of the worldview projected by Revelation. Such an inquiry, in order for it to be called 'islamic' must involve the "liberation of man first from magical, mythological, animistic, national-cultural tradition opposed to Islām, and then from secular control over his reason and his language".¹³ This liberation is known as *islamization*¹⁴, and refers

¹³ *Islām and Secularism*, 44.

¹⁴ Ibid Al-Attas is the originator of the concept of islamization. The term has been much in vogue in recent times and has received widespread acclaim as one of the most fundamental concepts central to the understanding of the current dilemma facing the Muslims and their apparent backwardness with regard to the sciences in particular. See also Wan Mohd. Nor Wan Daud, *The Educational Philosophy and Practice*

primarily to the return of man "towards perfection in his progress towards realization of his original nature as spirit".¹⁵ In addition, paramount to the process of islamization is,

..the islamization of language, and this fact is demonstrated by the Holy Qur'ān itself when it was first revealed among the Arabs. Language, thought and reason are closely interconnected and are indeed interdependant in projecting to man his worldview or vision of reality.¹⁶

Basic ontological questions concerning man and his role, the epistemological issues concerning God as Universal being and the Source of all knowledge were at once immediately answered by the Holy Qur'ān.¹⁷ It is clear then that the Arabic language experienced a transformation, not in terms of its systematic combination of roots, or form, but in terms of meaning, or matter. For instance, in pre-islamic Arabia, the term *kāfir* was used to indicate one who was ungrateful to a gracious host. Islām however islamized the term to mean one who denies Islām.¹⁸

Similarly, Muslim philosophy, in interpreting new ideas, was aided by the language of the Qur'ān which afforded new terminology quite distinct from Greek terminology both in form and contextual meaning. This did not mean however, that Greek terminology was completely replaced by Quranic language, for the Greek terms which

of Syed Muhammad Naquib al-Attas; *an Exposition of the Original Concept of Islamization*, (Kuala Lumpur: International Institute of Islamic Thought and Civilization (ISTAC), 1998).

¹⁵ Ibid., 45.

¹⁶ Ibid.

¹⁷ *Al-'Alaḳ* 96: 1-5. See also Wan Mohd. Nor Wan Daud, *The Educational Philosophy and Practice of Syed Muhammad Naquib al-Attas; an Exposition of the Original Concept of Islamization*, (Kuala Lumpur: International Institute of Islamic Thought and Civilization (ISTAC), 1998), 317. The author offers a brief yet profound historical perspective of the islamization of knowledge. Refer also to chapter one, in particular pages 36-37.

¹⁸ This example was explained to me by Syed Muhammad Naquib al-Attas. This very poignant example points to the fact that once Islamic elements are introduced into the language their meanings take on a whole new dimension. It also clearly speaks to the fact that the Arabic language is the only "divinely inspired living language and is in that sense 'new' and perfected to the superlative degree so that it- especially its basic Islamic vocabulary- is not subject to change and development nor governed by the vicissitudes of social change as in the case of all other languages which derive from culture and tradition." See Syed Muhammad Naquib al-Attas, *Islām and Secularism*, 46. In the above example, reference to the profane now adopts a new meaning directed toward the sacred. It also points to the importance of language in conveying correct meaning and the ability of the Arabic language to adopt new meaning while at the same time retaining its original form.

had become *arabised*, were still very much a part of Muslim philosophical sciences. The question one must ask however is to what extent did these *arabised* terms influence the sciences; were their meanings the same as those understood in Greek both in contextual meaning and form? In the preceeding paragraphs we have made reference to the fact that the genesis of Muslim sciences resulted from the fundamental elements of the worldview of Islām. The worldview itself must possess language reflective of Islām and its fundamental elements and hence, the sciences in order for them to be termed 'Islamic' or 'Muslim' must necessarily possess that same reflective language. Muslim philosophers were very careful to develop a system whereby it could not be assumed that the use of Greek terminology meant the adoption of those same ideas. Indeed some elements of Greek philosophy were adopted by Muslims if in fact their suppositions were not opposed to the worldview of Islām.

B. AL-ABHARĪ'S LIFE AND WORKS

Al-Abharī, apart from Sadr al-Dīn al-Shirāzī, who is commonly referred to as Mullā Ṣadrā, is possibly amongst the most significant and widely studied philosophers in Persia, Anatolia, Afghanistan, and the Indian subcontinent. Yet in general, he is far less widely known to the Muslim world than al-Farābī, Ibn Sīnā, al-Ghazzālī, Ibn Rushd, al-Tūsī, Abū'l Barakāt al-Baghdādī, or even Mullā Ṣadrā. His obscurity persists in a world little aware of what he actually wrote and taught. Factual information about the life of Athīr al-Dīn al-Mufaḍḍal ibn 'Umar al-Abharī al-Samarqandī, logician, philosopher, astronomer and mathematician is extremely scarce; the only somewhat reliable information about him concerns his ancestral lineage, his travels, and his works. All additional information about him is then only speculative in nature although we have, wherever possible, logically deduced some remarks.

The more reliable information about al-Abharī was offered by Şamsettin Sâmî Frachery.¹⁹ It would appear that al-Abharī traced his lineage to Samarqand, hence the allusion in his name. According to our source, al-Abharī was a scholar well known in the areas of philosophy and logic.²⁰ His books, the *Hidāyah* and the *İsāghūjī* in particular, were still being used as textbooks until the end of the nineteenth century in the *madrasah* system in the Ottoman provinces.²¹ In his introduction, Rauf Pehlivan Gür, the translator of al-Abharī's *İsāghūjī*, remarks that al-Abharī was born and raised in the town of Abhar (Ebher) in the province of Zarjān, northern Iran. He received his education first in Ebher, then in Khurasān, and finally in Baghdad.²² Abdülkuddûs Bingöl writes that al-Abharī was born in Mosul although his family was originally from Samarqand.²³ He also mentions that according to Muhammed Fevzî in his book *Seyfî'l-gullâb*, there are three possible meanings or origins for the term 'Abharī' (Ebherî). The first is that the term was indicative of the town to which a person belonged. Second, it referred to the name of a tribe. The third possibility was that it was an honorific title bestowed upon someone perhaps in the tradition of learned scholars of a particular philosophic tradition. However, with regard to al-Abharī the author of *Seyfî'l-gullâb* asserts the second possibility.

Mehmet Sadettin Aygen²⁴ however, claims that al-Abharī was born in a village called 'Eber'²⁵ situated across from a lake named after the village, near a town named Çay

¹⁹ Şamsettin Sâmî, *Kâmûsu'l- A'lâm*, (Ankara: Kaşgar Neşriyat, 1996), v. 2, 780.

²⁰ Ibid. According to Sâmî the most famous of his works are the *Hidāyat al-Ḥikmah*, *al-Kashf* (presumably this refers to the *Kashfu'l Haqā'iq fî tahrîr al-Dağā'iq*), *al-Zubdah* (refers to the *Zubdat al-Asrār*), and the *Kitāb İsāghūjī fî'l Mantîq* (this work is also referred to as the *Risālah al-Athīriyyah fî'l Mantîq* in other sources. See Brockelmann, *GAL Supplement I*, 608).

²¹ Ibid. According to Sâmî the date of al-Abharī's death was in 475. There is no indication to suggest whether this date is in accordance with the Hijrî calendar. According to the Hijrî calendar al-Abharī's death was recorded in the year 663, corresponding to 1265 in the Gregorian calendar. Therefore we are not sure if the date mentioned by Sâmî corresponds to one of the ten other known calendars or if it is simply an oversight on the part of the editor.

²² Esirüddin Mufaddal ibni Omer-ül Ebherî, *İsāghūjī-Klâsik Mantik*, Rauf Pehlivan Gür, (Istanbul: Yaylıcak Matabaası, 1987), 9.

²³ Abdülkuddûs Bingöl, *İslâm Ansiklopedisi*, (Istanbul: Türkiye Diyanet Vakfı, 1994), vol. 10, 75-76.

²⁴ Mehmet Sadettin Aygen, *Filozof Esirüddin Ebherî*, quoted by Abdülkuddûs Bingöl, see preceding footnote.

in the province of Afyon. He also claims that his grave is situated there. The author argues that al-Abharī was so named after the village in which he was born because the two names Eber and Abhar remotely resemble a homonym. There is however, no basis at all for this argument.

According to the reference in *Türk Ansiklopedisi*, al-Abharī claimed to be a native of Samarqand, and was educated in Khurasān and Baghdad.²⁵ We know that al-Abharī was in Mosul prior to the year 625/1228 where he was the student of Abū'l Faṭḥ Mūsā Kamāl al-Dīn ibn Yūnus.²⁷

He served Kamāl ad-Dīn as under-tutor in the *Badriya* college and used to say: "I should not have left my native place and come to Mosul, had I not formed the intention of studying under the *shaikh* (*Kamāl ad-Dīn*)."²⁸

The preceding quotation indicates that, contrary to what is written by Abdülkuddūs Bingöl, al-Abharī was not a native of Mosul, and therefore, could not have been born there. If we are to assume the validity of Ibn Khallikān's recollection, there is no doubt then that all references made in contemporary encyclopedias with regard to al-Abharī's birthplace are in error. Hence, one may reasonably conclude that al-Abharī was either born in Samarqand or was the scion of a family originating from there, then moved to Khurasān and Baghdad, was later educated in Mosul²⁹, under the tutelage of Kamāl al-Dīn, then in 625/1228 moved to Irbil (Arbela), although perhaps not in that order.

Al-Abharī's birthdate remains somewhat controversial. Most modern sources and encyclopedias report his date of birth to be circa 1200 CE. However, we are not

²⁵ Today the village is known by the name Doğanlı

²⁶ *Türk Ansiklopedisi*, (Ankara: Millî Eğitim Basımevi, 1966), vol. 14, 261.

²⁷ *Ibn Khallikān's Biographical Dictionary*, Bn Mac Guckin De Slane tr., (Beirut: Librairie du Liban, 1970), vol. III, 468.

²⁸ *Ibid.*, 469.

²⁹ It is reported by Abdülkuddūs Bingöl, *İslâm Ansiklopedisi*, vol. 10, 75-76., that for a brief period while in Mosul al-Abharī was under the pretectorate of the palace.

convinced that this estimation is valid. According to the sources,³⁰ al-Abharī was also a student of Fakhr al-Dīn al-Rāzī. If this account is true, then his scholarship with al-Rāzī was perhaps his first exposure to the world of philosophical thought. More importantly, this would indicate that he was born much earlier than 1200 CE. Al-Rāzī died in the year 606H/1209CE. If indeed our author was born circa 1200 CE, not only would he have had to have been in Herat, he would have to have been less than nine years old in order to study with al-Rāzī. This, in our opinion is wildly inconceivable. In our estimation therefore, he must have been born circa 1190 CE. This estimation, we believe is more accurate, given the speculation concerning his place of birth and given the fact that al-Rāzī travelled to Khwarizm and Transoxiana,³¹ it is possible that al-Abharī could have studied with al-Rāzī during his sojourn there.

At the time of his birth, “Bukhara and Samarqand were two of the richest cities in the world, on the caravan route from China to the West.”³² The empire of Khwarizm Shah,³³ which had subdued Seljuq suzerainty held sway, ruled by ‘Alā’ al-Dīn Muḥammad,³⁴ but not for long. At the time he was preoccupied with his ‘Abbāsid rival to the West, the caliph al-Nāṣir li-Dīn Allāh, and as such did not concern himself with the impending catastrophic storm brewing in the East.³⁵ The Mongol Temujin, who assumed the title Cenghiz Khan launched an assault on both cities in the year 1220 without

³⁰ See, Muhammad Ṣāliḥ Zarkān, *Fakhr al-Dīn al-Rāzī wa Ārā’uh al-Kalāmiyyah wa’l Falsafīyyah*, (Cairo: Dār al-Fikr, 1963), 33. Zarkān quotes his sources from Ibn Al-‘Ibrī and Khwansārī’s *Rawḍat al-Jannāt*. The Zarkān source is also quoted by Yasin Ceylan in *Theology and Tafsīr in the Major Works of Fakhr al-Dīn al-Rāzī*, (Kuala Lumpur: International Institute of Islamic thought and Civilization, 1996), 12. In addition Professor Ceylan cites the *Al-Risālah al-Kamāliyyah fi’l Haqā’iq al-Ilāhiyyah*, ed. Sayyid Bāqir Sabzawārī, (Tehran, 1335 AH), *nūn* of the introduction; and Ibn Jawzī, *Mir’āt al-Zamān fi Tārīkh al-A’yān*, (Hyderabad, 1952), 8th ed., v. 18, 542. We have only perused the books of Zarkān and Yasin Ceylan.

³¹ *Theology and Tafsīr in the Major Works of Fakhr al-Dīn al-Rāzī*, 3.

³² Sir John Glubb, *A Short History of the Arab Peoples* (New York: Stein and Day, 1970), 194.

³³ The empire extended from the Ural Mountains to the Persian Gulf, and from the Indus to almost the Euphrates. See Edward G. Browne, *Literary History of Persia*, (Cambridge: Cambridge University Press, 1977), v. 2, 426.

³⁴ He was the great- grandson of Atsiz, the descendant of Anūshtigīn cup bearer of Malīkshah.

³⁵ *Literary History of Persia*, v. 2, 436.

encountering any resistance.³⁶ ‘Alā’ al-Dīn Muḥammad fled the kingdom prior to the invasion suspecting perhaps that his treachery and murder of Mongol emissaries, dispatched by Cenghiz Khan seeking trade with their neighbors to the West, would invite the wrath of the Mongol warlord.³⁷ According to Ibn Athīr, in less than one year the Mongols emerged from the confines of China and attacked the cities of Turkistan and then advanced on the cities of Transoxiana before laying bare the cities of Khurasān, Rayy, Hamadan and Azerbaijan.³⁸ The sacking of Khurasān was perhaps the first in a series of crushing blows to the intellectual heritage of the Muslim world up to that point. Yāqūt al-Ḥamawī, the eminent geographer and contemporary friend to Ibn Athīr, in his letter to the vizier of the ruler of Aleppo, lamented the plunder of Khurasān, “...even Iblīs himself would bewail this dire catastrophe”, in the process directing blame to ‘Alā’ al-Dīn Muḥammad for his cowardice.³⁹ Meanwhile in the West, the ‘Abbāsīd caliphate was enjoying prosperity under the capable rule of the venerated al-Nāṣir, and following his death in 1226, under the rule of al-Mustanṣir.⁴⁰ It was not until the terrifying sacking of Baghdad in 1258 by Hulagu Khan⁴¹ that the ‘Abbāsīd caliphate finally succumbed.

Judging from the aforementioned chronology of events, al-Abḥarī’s family, fearing the Mongol onslaught, probably fled Samarqand for the relative safety of Khurasān until it too was ransacked. Al-Abḥarī then probably sought asylum in Baghdad, unsurpassed in its reputation for being the attraction for the learned and learning. Sadly Baghdad too would suffer the same fate as Khurasān, so perhaps he then proceeded North

³⁶ *A Short History of the Arab Peoples*, 194.

³⁷ *Literary History of Persia*, 435.

³⁸ *Ibid.*, 428

³⁹ *Ibid.*, 432.

⁴⁰ *Ibid.* Upon al-Nāṣir’s death he was succeeded by his son but he only ruled for nine months before being succeeded himself by al-Mustanṣir. For a more detailed elaboration see Sir John Glubb *The Empire of the Arabs*, (Englewood Cliffs, New Jersey. Prentice- Hall, 1963).

⁴¹ Hulagu Khan eventually embraced Islām and was patron to Naṣir al-Dīn al-Ṭūsī who accompanied him on the expedition that led to the conquest of Baghdād in 1258. Al-Ṭūsī was a contemporary of al-Abḥarī, and ‘Aṭā Malīk al-Juwaynī. See *Literary History of Persia*, 443.

to Mosul. It was sometime after his stay in Mosul that al-Abharī received an invitation from his friend and contemporary Muḥammad ibn Muḥammad ibn al-Ḥassan al-Ṭūsī, otherwise known as Naṣīr al-Dīn al-Ṭūsī.⁴² Al-Ṭūsī had gained the favour and confidence of Hulagu Khan, and “was able to gain his approval to construct a major observatory at Marāgha.”⁴³ Al-Abharī accepted al-Ṭūsī’s invitation and collaborated with other well known scholars who left an indelible seal on history, for the observatory together with its instruments and fine library was to become “a major scientific institution in the history of science.”⁴⁴ The period al-Abharī spent at the observatory at Marāgha was perhaps the crowning achievement of his life.

At some point in his life he travelled to Anatolia where he was reportedly well received by the Turkic Beg’s who loved the sciences. There al-Abharī lectured on both philosophy and the sciences.⁴⁵ This is perhaps why the *Hidāyat al Hikmah* was used as a textbook in the Ottoman *madrasah*’s until they were abandoned some six hundred and

⁴² Chronologically we may confirm with a high degree of certainty our assumption that al-Abharī’s sojourn in Marāgha occurred sometime after his stay in Mosul. More precisely, one may even propose that al-Abharī proceeded to Marāgha following his travels to Anatolia. According to known facts, we know that construction of the Marāgha Observatory began in the year 657H/1259CE. According to Aydın Sayılı, al-Abharī was one of a number of impressive scientists attached to the Observatory, “probably not included in the original staff”. Assuming that this was indeed the case, one may presume that al-Abharī was present at the Observatory sometime between 1260CE and 1265CE. However, Sayılı also makes mention of the fact that according to Rukn al-Dīn ibn Sharaf al-Dīn al-Amūlī, the fifteenth century astronomer writing in his *Zij-i Jāmi‘-i Sa‘idī*, that after al-Ṭūsī’s death which was reported to be in 1274CE, al-Abharī and “the astronomers of the observatory waited (sat) up to thirty years until the revolution of Saturn became complete.” We have not been able to personally peruse al-Amūlī’s *Zij* and therefore we are unable to correctly interpret the preceding passage. However, we are doubtful that al-Abharī was even included in the reference because he did not outlive al-Ṭūsī. For further clarification and study see, Aydın Sayılı, *The Observatory in Islam and its place in the General History of the Observatory*, (Ankara, Turk Tarih Kurumu Basımevi, 1988).

⁴³ Seyyed Hossein Nasr, *Dictionary of Scientific Biography, Standinger to Zwelfer*, C. Gillispie (ed. in chief), (New York: Charles Scribner’s Sons, 1981), vol. 13, 509.

⁴⁴ *Ibid.*, 510

⁴⁵ Abdülkuddūs Bıngöl, *İslâm Ansiklopedisi*, vol. 10, 75-76. The term used by Bingöl in reference to the sciences is “positive sciences”. What is meant here we think is the exact sciences namely mathematics, astronomy etc. Why the author chooses to use the term “positive” is perhaps due to the influence of “positivism”. If this is the case we think the choice of words to be poor because although the reference is understood the importation of irrelevant terms is unnecessary. Irrelevant because positivism did not and does not exist in the Islamic intellectual world. It came about as a result of the conceptual apathy towards revealed sciences in the West, unable to forge an understanding between the theological and the physical sciences. The resulting disillusion was positivism.

fifty years after al-Abharī's death⁴⁶ which was recorded in 663H/1265CE.* If our estimation concerning al-Abharī birth is correct, then he was probably close to seventy-five years old at the time of his death. Yet the question as to why so little is known about al-Abharī remains. Ibn Khallikān recalls his scholarship in the following excerpt:

Notwithstanding his high reputation as a master of the sciences, Athīr al-Dīn used to sit down before him (Kamāl al-Dīn) with a book in his hand and read it to him (in order to profit by his observations); and yet, on the same day, scholars would be studying works composed by himself; that I saw with my own eyes.⁴⁷

Two of his works mentioned by Ibn Khallikān were well known at the time⁴⁸ although he makes no mention of the *Hidāyat al-Ḥikmah*.

The present work attempts to bring to light for the first time, however inadequately, some of the main ideas in his system to the English speaking audience. There is an aspect of originality in this work primarily because this present translation into English in its entirety and the subsequent commentary with the text in Arabic is the first of its kind. This study is a critical examination of the *Hidāyat al-Ḥikmah*. This will also be the first time this text is translated into English insofar as it is an important work on thirteenth-century *Mashshā'ī* philosophy. We understand the term *Mashshā'ī* to refer to the Aristotelian rooted Islamic rational, logical, empirical or exact disciplines, namely mathematics, logic, physics, and astronomy which were developed in Islamic thought by Muslim philosopher-scientists.

⁴⁶ Ibid. See also *Türk Ansiklopedisi*, vol. 14, 261.

⁴⁷ *Ibn Khallikān's Biographical Dictionary*, 469.

⁴⁸ The two works mentioned by Ibn Khallikān are the *Ta'liqā fi'l Khilāf* and the *Zij*. See *Ibn Khallikān's Biographical Dictionary*, 468. We are not aware of the first work mentioned as it does not appear in any bibliographic reference. As far as the latter work, we are not sure which book Ibn Khallikān is referring to. There are two works written by al-Abharī bearing the title *Zij*. The first is *al-Zij al-Shāmīl* (there is also a commentary on this work bearing the same name); the second is known by three names: *al-Zij al-Mulakhkhas*, or *al-Zij al-Ihtisārī*, or *al-Zij al-Athirī*. Presumably the second composition is an abbreviated summary of the first.

The book itself discusses the problems of classical Islamic philosophy, and consists of three main parts, namely logic (*al-Manṭiq*), physics (*al-Tab‘iyyāt*), and metaphysics (*al-Ilāhiyyāt*). The book also contains further explanations which represent the author’s own observations, referred to as ‘guides’ (*hidāyah*)⁴⁹, and a conclusion (*khātimah*). All the manuscripts used throughout the duration of this study however, do not include the first section, the section on logic. A reasonable explanation for the obvious and presumably intentional omission of this section is warranted. A consultation with authoritative logicians and historians of logic ensued in hopes of finding a solution. It was proposed that al-Abharī’s *Īsāghūjī* was in fact the missing section from the *Hidāyat al-Ḥikmah*; however, proof of this bold supposition remained elusive. We began working on the assumption that this was in fact not the case, since all reliable bibliographic dictionaries make reference to both the *Hidāyat al-Ḥikmah* and the *Īsāghūjī* as separate works. Furthermore, if the aforementioned supposition were true, why is there no mention of it or even an allusion to it anywhere? Kātib Çelebi answers this question, for he makes reference to the *Hidāyat al-Ḥikmah* and even informs the reader how the introduction to the work begins, thus clearly distinguishing it from the introduction to the *Īsāghūjī*.⁵⁰ In the course of our research we were able to find a published edition of the missing section on logic, and as far as we know this is the only published edition of the said work.⁵¹

Having clarified this point, it is legitimate to inquire into the reason for its omission from the original text. This task however, poses an even greater difficulty since there does not appear to be any mention of its excision in any of the source material we encountered. Therefore, any answer afforded will ultimately be speculative in nature. One

⁴⁹ We have given a very literal translation to the term. Perhaps it would be more appropriate to render the term in English as a ‘note’ or even a ‘*nota bene*’ as the text will show. However we have chosen to stick with tradition and be as literal wherever possible.

⁵⁰ Kātib Çelebi, *Kashf al-Zunūn*, (Istanbul: Milli Eğitim, Basimevi, 1972) v 9, 2028.

⁵¹ See Muhammad Taqī Dānishpāzhūh, “Dū Risālah Dar Manṭiq”, *Majallah-yi Dānishkadah-yi Adabiyyāt va ‘Ulūm-i Insānī*, 1349, n. 3 & 4, 457- 494.

opinion may be that the reason for its absence from the text was because al-Abhari's *Īsāghūjī* was the preferred manual on logic. A closer examination of both texts on logic suggests that the text of the *Īsāghūjī* betrays a more mature, systematic treatment in comparison with the missing section from the *Hidāyat al-Hikmah*. This explanation would be suggestive of two things; that the *Īsāghūjī* was composed after the completion of the *Hidāyat al-Hikmah*, and that the section on logic from the latter composition was deliberately removed because a subsequent more lucid treatment on the subject was afforded by the former composition. Yet the most obvious reason with regard to why the section on logic was removed from the *Hidāyah* is perhaps answered by al-Abhari himself. In the introduction to the section on logic, al-Abhari says, "this treatise on logic I have dictated to some colleagues extemporaneously". A perusal of the work itself clearly indicates an impromptu composition, hence the rather haphazard arrangement incompatible with the style of his *Īsāghūjī*, as we have previously mentioned. In addition, a comparison with the remaining sections of the *Hidāyah*, reveals that the section on logic exhibits a certain incongruity, unlike the systematic arrangement of arguments with regard to both sections on physics and metaphysics which follow a deliberate method. With this explanation, coupled with the other aforementioned probabilities, one is able to construct a more plausible in answer to our query with regard to the reason for the exclusion of the section on logic from the text of the *Hidāyah*.

Since we were unable to source any other composition by the same author with one exception, namely his *Īsāghūjī fī-l Mantīq*,⁵² we are unable to make generalizations in

⁵² The edited version of this work in Arabic and the one we used as a manual is the edition compiled by Rauf Pehlivan Gür, *Īsagūcī Klasik Mantik*, (Istanbul: Gonca Yayınevi, 1987). Edwin E. Calverly offers a version in English entitled, "al-Abhari's *Īsāghūjī fī-l Mantīq*", *The Macdonald Presentation Volume*, (London, 1933), 75-85. Cf. also C. F. Seybold, "al-Abhari's *Īsāghūjī* und al-Fanārī's Kommentar Dazu", *Der Islam*, 1919, v. 92, 112-115. The *Encyclopedia Iranica* suggests that "al-Abhari's *Īsāghūjī* is perhaps the most popular Arabic elaborations of Porphyry's *Isagogue*". This is perhaps a little misleading because although the title resembles that of Porphyry's the content is distinctly dissimilar. Where Porphyry only discusses the five Universals of Aristotle, al-Abhari includes an introduction to the explanatory phrase (*al-qawl al-shāriḥ*), on propositions (*al-qadāya*), syllogism (*Qiyās*), dialectics (*al-Jadal*), rhetoric (*al-khaṭābah*), poetry etc. Hence while the title may suggest some similarity with the compilation of

terms of his writing style. However with regard to the present composition, al-Abhari's writing style is concise. He does not afford much elaboration preferring to adopt a simplified method of writing. He is consistent with regard to the use of the disjunctive proposition (*shartīyyah munfaṣilah*) employing this method in presenting his arguments to the audience. In considering proofs for his arguments, his penchant for the conjunctive proposition (*shartīyyah muttaṣilah*), both the cogent (*luzūmiyyah*) and the coincidental (*itīfāqiyyah*), is clearly indicative of his expertise, thorough grasp and understanding of logic. In addition, in keeping with the tradition of his predecessors, he displays a profound knowledge of the richness of the Arabic language, an attribute of a learned scholar. For example, the terms 'mawdū' and 'musnad ilayhi', or 'maḥmūl' and 'musnad', are referred to in the same manner to mean the subject and predicate of a proposition respectively. In general the *Hidāyat al-Ḥikmah* is typical of the Avicennan tradition, albeit in a much abridged and concise version. Perhaps the book, at its very inception, was meant to be an elementary treatise built upon the philosophical works of Ibn Sīnā to be used as a textbook manual in the *madrasah*'s. Indeed one may venture to say that the *Hidāyat al-Ḥikmah* is akin to the *Isagogue* of Porphyry in terms of intention.

We have mentioned that the *Hidāyat al-Ḥikmah* is tripartite, comprising logic, physics, and metaphysics. The section on logic which is dealt with first is, for all intents and purposes, primarily meant to acquaint the reader with an overview of the rules of logic, and its purpose. It is ultimately an indication of al-Abhari's method⁵³ as the text

Porphyry, the *Isāghūgī* differs in both form and matter. No doubt al-Abhari was familiar with the work of Porphyry, yet to postulate that he merely elaborated on the latter's work primarily undertaking the task of a translator amounts to a lack of critical examination of his work.

⁵³ By method we are not referring to the unidimensional conceptual approach, associated mainly with the much in vogue popular Orientalist connotation in reference to either or both Greek and Western approaches. Nor do we mean an exclusive orientation towards an exclusive *mode d'emploi*, for instance rationalist, materialist, deductive, inductive, etc. In defining the Islamic worldview and its fundamental elements it becomes clear that such a worldview does not admit an exclusivity in terms of method in its application towards the elucidation of knowledge. Therefore, we do not mean that the author, in the development of his approach to philosophy employs only one method exclusively, we are simply indicating that while al-Abhari displays a preponderance towards a particular kind of approach it would be misleading to assume that he remains exclusive in its application.

will show. The second section on physics is also tripartite. Each is referred to as a division (*qism*), and is discussed systematically according to the order of nature. What we mean is that the writer first addresses the hierarchical order upon which his philosophical scheme will be developed in the order of firstly, abstract mental conceptions regarding the reality of nature, followed by mechanics. The third division begins with a discussion on meteorology concluding with a treatment of organic matter. Each division comprises ten, eight, and six chapters (*fuṣūl*) respectively. In keeping with tradition the third section is also tripartite. Similarly the author has arranged the sections in the order of firstly, abstract mental conceptions regarding the realities of existents as a prelude to his philosophy, followed by a discussion concerning God, and finally on the Intellects. Each division comprises seven, ten, and four chapters respectively. In the concluding chapter al-Abharī lends insight into some of his own observations amongst which is included an exegesis of happiness and the fate of the soul.

To date, as far as we are aware, there has been no complete translation from Arabic to English of Aristotelian physics. Apart from being we believe, the only translated work of the *Hidāyat al-Ḥikmah* in its entirety, it will also be one of the first renderings into English of Avicennan Physics as developed by the Muslims. Furthermore, as previously mentioned, this present manual was an extremely popular and extraordinary work, as the commentaries and supercommentaries will attest, which was used as a textbook by the *madrasah* system for hundreds of years. This is another indication relative to its importance. Unfortunately, although the vast number of commentaries and supercommentaries have exposed the study of this book to the Arabic speaking milieu, the lack of a translation and critical edition of this book has hampered its proper study for English speaking scholars. The intention of this study then must certainly be to afford a translation and commentary of al-Abharī's work as he was known to have been a representative of the philosophical traditions of both al-Fārābī and Ibn Sīnā. It is our

hope, nevertheless, that even so concise an introduction to him and to the present composition may offer some notion of his philosophy and spur the reader of philosophy to seek out the original sources in Arabic. The chief authorities on whom we based our commentary of the text are al-Attas, Ibn Sinā, al-Ghazzālī, and Mullā Ṣadrā.

As far as we are aware, the *Hidāyat al-Ḥikmah* has been published once in Arabic, together with an Urdu commentary written by Maulāna Mumtāz al-Dīn Faḍīl al-Deobandī, in Dhaka.⁵⁴ This copy has been employed as the principle text for our study; however, for the purpose of critically editing this text we are also employing two manuscripts obtained from the Central library of the University of Cairo⁵⁵, and two microfilms from the Aya Sofya Library.⁵⁶

The two most famous and best known commentaries on the *Hidāyat al-Ḥikmah* are the ones by Mīr Ḥussayn al-Maybūdī composed in 880H/1475CE⁵⁷, and by Mullā Ṣadrā.⁵⁸ These commentaries aim to clarify some of the more obscure and problematic meanings of the text, and also divulge a certain amount of information about the differences between the thirteenth and fifteenth centuries, as in the case of the Maybūdī commentary, and between the thirteenth and seventeenth centuries, as in the case of the Ṣadrā commentary. Unfortunately we are not privy to either the Maybūdī or the Ṣadrā commentary, “which continues to be taught in the Islamic schools of the Indian sub-continent”⁵⁹, and whose lengthy enigmatic nature is itself worthy of commentary, study, and clarification.

⁵⁴ Al-Ḥāj Mawlawī ‘Abd al-Karīm Ṣāhib publisher, no date.

⁵⁵ Number 44717, on Metaphysics; number 22854 on both Physics and Metaphysics.

⁵⁶ AYS 2474 and AYS 4855 both on Physics and Metaphysics

⁵⁷ C. Brockelmann, *The Encyclopedia of Islam*, (Leiden: E. J. Brill, 1986), v. 1, 98-99.

⁵⁸ No date, no publisher.

⁵⁹ M. M. Sharif, *A History of Muslim Philosophy*, (Delhi: Low Price Publications, 1995), v. 2, 960, n. 74.

There have also been several supercommentaries written on the Maybūdī commentary, among them written by Muslihuddīn-i Lārī (979H/1572CE), and Pīr Muḥammad b. ‘Alā al-Dīn ‘Alī al-Fanārī (1040H/1630CE).⁶⁰ Other references to commentaries and supercommentaries worth mentioning are to be found in Abdülkuddūs Bingöl, see reference number 52 above.

Other works attributed to al-Abharī include:

(1) *Īsāghūjī fi-l Mantiq*, also referred to as *al-Risālah al-Athīriyyah fi'l Mantiq*.

There appears to have existed a certain discontent in Islamic logical studies with the Porphyrian introduction to logic. As early as the 6th/12th century, one observes the emergence of new introductory works on logic which, while adopting the same title as Porphyry's *Isagogue*, differed radically with respect to content, outlook and purpose. As far as one may ascertain the *Īsāghūjī* of al-Abharī was the first of a new introduction to logic with the spirit of this kind in the Islamic logical tradition. His introduction to logic had an enormous influence on subsequent logical studies, for it was later adopted in almost every *madrasah* curriculum as a standard text and was read together with the many different commentaries written on it. Its popularity also extended to the West, for the Arabic text accompanied by a Latin translation was first published by Thomas Novariensis in Rome in 1625 CE.⁶¹ One may conclude therefore, that the *Īsāghūjī* was known to the West as a significantly important logical manual.

Al-Abharī's *Īsāghūjī* begins with the intention of the logician, which is to study conventional verbal denotation, briefly citing the different kinds accompanied with examples. This is followed by a brief summary of concepts and their divisions, citing examples for each. His discussion on Universals is brief and concise. He then moves on

⁶⁰ Abdülkuddūs Bingöl, *İslâm Ansiklopedisi*, vol 10, 75-76.

⁶¹ Carl Brockelmann, *GAL*, (Leiden: E.J. Brill, 1937), Supplementary 1, 841.

to an abbreviated discussion concerning the doctrine of definition as a prelude to the discussion concerning propositions, contradiction, and conversion without addressing the pendants of syllogism. His aim is only to introduce the reader to the major parts of logic supported by clear examples. A larger introduction on logic, similar to the *Īsāghūjī fī-l Mantiq* is the *Risālah Shamsiyyah fī 'Ilm al-Mantiq* composed by Najm al-Dīn 'Alī ibn 'Umar al-Qazwīnī, also known as al-Kātibī (d. 657H/1276CE).

If one were to make a comparison of the books on logic used by the *madrasah*'s, the most common would be the *Īsāghūjī fī-l Mantiq* which contains a much shorter introduction to logic than the *Kitāb Īsāghūjī fī'l Mantiq* of Khalīl b. al-Mullā Ḥusayn al-Si'irdī (1167-1259H). On the other hand the *Risālah Shamsiyyah* of Qazwīnī is a more extensive manual in comparison. Such works seem to have continued until the time of al-Si'irdī, and as far as we have been able to ascertain, his work was the last one written in the Abhariān rather than that of the Porphyrian tradition. For this reason we find the *Īsāghūjī fī-l Mantiq* of al-Abharī to be significant as it informs us not only of the latest developments in logical studies done in the Islamic milieu, but also of the curriculum of logical studies in the *madrasah* systems of earlier periods.

(2) *Tanzīl al-Afkār fī Ta'dīl al-Asrār*.⁶²

(3) *Kashf al-Ḥaqā'iq fī Tahrīr al-Daqā'iq*.

(4) *Risālat al-Bāhirah fī Maqālat al-Zāhirah*.

(5) *Kitāb al-Maṭālī'*.

(6) *Kitāb Bayān al-Asrār*.

(7) *Talkhīṣ al-Ḥaqā'iq*.

(8) *Zubdat al-Asrār*.

(9) *Tahzīb al-Nuqāt*.

⁶² The following references to compositions were obtained from Abdülkuddūs Bingöl, *İslām Ansiklopedisi*, (İstanbul: Türkiye Diyanet Vakfı, 1994), v. 10, 76.

- (10) *Risālah Mushtamilah ‘alā Thamāni ‘Ashari Mas’alatin fi’l Kalām*. A philosophical theological discourse, concerning the eighteen questions posed by the *mutakāllimūn*.
- (11) *Mukhtaṣar fi ‘Ilm al-Hay’ah*. This book comprises twenty two chapters dealing with the major problems of astronomy.
- (12) *Al-Zij al-Shāmil*. On Astronomy. A commentary of this book which bore the same title was composed by Abū’i Wafā’ al-Buzjānī.
- (13) *Risālah fi’l Usturlāb*.
- (14) *Dirāyat al-Aflāk*.
- (15) *Al-Zij al-Mulakhkhaṣ*, also known as *al-Zij al-Iḥtiṣārī*, or *al-Zij al-Athīrī*.
- (16) *Mulakhkhaṣ fi Ṣinā’at al-Majistī*.
- (17) *Iṣlāh Kitāb al- Ustuquṣṣāt fi’l Handasah li Uqlidis*.

Throughout the course of our research we have on occasion taken note of the fact that in some sources, namely modern contemporary encyclopedias, there is a tendency on the part of the writer or writers to introduce notions pertaining to nationalism and ethnicity. This fact was evident to us with respect to al-Abharī. Both Persian and Turkish sources claim al-Abharī’s ethnic origin. Perhaps al-Abharī would be humbled to know that both nations want to claim him for their own. However, as previously mentioned, source material pertaining to his life and works is largely vacuous and scant. Therefore, how the sources arrive at such a conclusion remains mysterious. More importantly, al-Abharī himself does not mention or make reference to either his ethnic background or to his political allegiance. This obvious omission clearly points to the trivial nature of such an inquiry. For al-Abharī it would suffice to say that he was a Muslim Philosopher-Scientist. Thus, by virtue of his religious allegiance, questions with regard to both his ethnic origin and political allegiance become irrelevant. More importantly, these attempts will ultimately cause disunity amongst the Muslims, and this was certainly not the aim of the Muslim masters.

CHAPTER ONE

THE INTELLECTUAL MILIEU PRECEDING AL-ABHARĪ

In the previous chapter we have briefly alluded to the complex path travelled with reference to the reception of Greek philosophy in the Islamic world.¹ In order to paint a picture of the intellectual milieu preceding al-Abharī and to indicate the place of the *Hidāyat al-Ḥikmah* in the Islamic philosophical tradition, we present in this first section to present a brief summary of the socio-political and intellectual atmosphere of the preceding centuries, in particular the period between the ninth century until the thirteenth century, the time of our author. However, in doing so I have not conducted an exhaustive summary of all the thinkers and literary figures known to have lived during the periods mentioned, for two reasons. Firstly, the order of prolixity will probably result in more conflict rather than resolve on the part of the reader; secondly, in general the ideas discussed during this period do not differ much in terms of matter until the time of Ibn Sinā, hence, to elaborate on each and every idea would be redundant. Therefore, in order to preserve the themes central to the following discussion we select only those prominent figures which have become synonymous with the Islamic sciences in general, and with philosophy in particular.

As far as we know we are not aware of other books with the exception of al-Ghazzālī's *Maqāṣid al-Falāsifah* and Ibn Sinā's *ʿUyūn al-Ḥikmah* which were written with comparatively the same intention as al-Abharī's work currently under study. Indeed,

¹ For further study and clarification see F. E. Peters, *Aristotle and the Arabs: The Aristotelian Tradition in Islam* (New York: New York University Press, 1968), and Oliver Leaman, *An Introduction to Medieval Islamic Philosophy* (Cambridge: Cambridge University Press, 1985).

assuming that all three aforementioned works had the same intention, this is a clear indication of the importance of such a work.

Indeed prior to the rise of Islam the task of translating a number of Greek texts into Syriac and later into Arabic was already being done by Nestorian Christians in both Syria and Persia where centers of learning were established. By the middle of the eighth century these centers of learning began to receive patronage by the 'Abbāsid caliphs, who had by this time established Baghdad as their capital.² Caliph al-Ma'mūn in particular was responsible for the founding of *Bayt al-Hikmah*, a research institute serving as the primary axis for the transmission of translated works. At the time medical and astronomical texts were of primary interest which was perhaps partly due to the fact that many translators were employed as physicians to the caliph as well. In addition a number of Platonic dialogues, including the *Timaeus*, Euclid's *Elements*, and Ptolemy's *Almagest* were among the translated works. Two centuries later virtually nothing remained as far as the work of translations for "almost the entire corpus of Greek medicine, natural philosophy, and mathematical science had been rendered into usable Arabic versions."³

The claim that there exists a controversy with regard to the role of Greek science in Islamic culture is most certainly a product of Orientalism. The further notion that Greek science was wholly incorporated into Islamic culture points to the preferred bias on the part of the West for Greek contribution. We are reminded that Christianity adopted Platonic ideas immediately upon their appearance in the West as a means of legitimizing the interpretations of scripture, assuming that the same was later true of Islām. This belief inevitably led the West to conclude that the Islamic sciences simply embraced Greek

² See David Lindberg, *The Beginnings of Western Science: The European Scientific Tradition in Philosophical, Religious, and Institutional Context, 600 B.C. to A.D. 1450*. (Chicago: The University of Chicago Press, 1992), 168.

³ *Ibid.*, 170 For a recent summary of the translation activity, see Dimitri Gutas, "Aspects of Literary Form and Genre in Arabic Logical Works", *Glosses and Commentaries on Aristotelian Logical Texts*, Charles Burnett (ed.), (London: The Warburg Institute, University of London, 1993), 29-76.

ideas without contributing at all to the various disciplines, remaining instead as merely a repository waiting for the birth of the European Renaissance. It would appear that the more Islamic works are proven to be certifiably original both in matter and form, the more the inclination to ascribe the roots of an idea to Greek origin, as if to deny the sciences in Islām their rightful claim in the history of ideas. No doubt the transmission of Greek sciences to the Muslim world had an immense impact on subsequent learning traditions, however, the seal of Islām permanently influenced those ideas by infusing fundamental elements derived from Revelation, effectively removing all traces of a pagan civilization.

The following thinkers lived within the shadow of the age of splendor, during the rule of the ‘Abbāsīd caliphs. We are reminded in the elegantly portrayed narratives of the *Thousand and One Nights*, of the economic wealth, literary wit, cultural splendor, and political upheavals. Although perhaps much of the descriptions of the times were exaggerated to suit the powers that held sway, what we are interested in is the intellectual milieu surrounding that culture. The period of the *Thousand and One Nights* may be referred to as the “exotic paradigm”,⁴ in large part due to the descriptions contained in those narratives complete with unabashed flattery and entertaining wit. However, the reality, referred to as “the paradigm of patronage, was an uneasy symbiosis between artist and court patron”.⁵ The artist was essentially at the mercy, whim, and good graces of his patron. Depending on the latter’s humors, the former was either held in high esteem or was banished to the point of destitution, or worse. Conversely, the skill of the artist or literary man was such that he saw opportunity in shameless flattery. This was frequently the case with al-Mutanabbī (915-965CE), the renowned poet who would often resort to fits of poetic genius in order that his patron’s purse strings be relaxed, simply by clever

⁴ Ian Richard Netton, *Al-Fārābī and His School*, (London and New York: Routledge, 1992), 19.

⁵ *Ibid.*, 21.

manipulation, flattery and an acute sense of his patron's shortcomings, or more precisely his vanities, which he would then use to his favor.⁶ Then there is the "ideal paradigm"⁷, a phase where there was mutual respect between the learned and patron, not simply due to monetary incentive but rather an actual concerted effort to advance the cause of learning.

The ninth century was a period of intellectual ferment; it was a time of translations. The ideologically opposed arguments concerning philosophy and *kalām* were in infancy, and the controversies posited by Mu'tazilism had the political ear of the 'Abbāsid caliph. These controversies concerned matters of theology between both the "patterns of tradition (*naql*) and reason ('*aql*)".⁸ It would appear that each tradition adhered to an established ideology which could neither share any common features between them nor agree to disagree. Abū Yūsuf Ya'qūb b. Ishāq al-Kindī (185-256/801-870) emerged as the first thinker in Islām to attempt an ideological synthesis between the two. It comes as no surprise then that he founded a school which combined the sciences with philosophy. Born in Basra the scion of noble Arab lineage from the tribe of Kindah he was afforded the best education possible. Influence from the school of Jundishāpūr, made famous by the Bakhtishū family, was perhaps the impetus for his interest toward learning. Al-Kindī was opposed to the Greek idea with regard to both the eternity of the world and the rationalist assumption that nothing begets nothing.⁹ In relation to the former opposition he would often resort to the authority of the Qur'ān as a source of proof,¹⁰ while in terms of the latter assumption, al-Kindī accepted the Neoplatonic emanationist theory conditionally asserting a created first being *ex nihilo* through the act

⁶ Ibid., 21-22.

⁷ Ibid., 25.

⁸ Mustafa Ceric, *Roots of Synthetic Theology in Islām: A Study of the Theology of Abū Maṣṣūr al-Māturīdī*, (Kuala Lumpur: International Institute of Islamic Thought and Civilization, 1995), 25.

⁹ See for instance Majid Fakhry, *A History of Islamic Philosophy*, (New York: Columbia University Press, 1983), 69. In fact al-Kindī was opposed not only to the doctrine of the eternity of the world and the denial of creation *ex nihilo*, but also to the impossibility of bodily resurrection, the impossibility of miracles and the view that knowledge derived from prophetic revelation was invalid

¹⁰ *Roots of Synthetic Theology in Islām: A Study of the Theology of Abū Maṣṣūr al-Māturīdī*, 26.

of God, a significant departure from the Aristotelian conception.¹¹ This points to the fact that from the very beginning, al-Kindī in particular, and later on the Muslim philosopher in general, could not be thought of as being a mere transmitter of Greek thought. Al-Attas explains:

Al-Kindī's remark in the book addressed to al-Mu'taṣim that he wanted to *complete* what the Greek philosophers did not fully express points to the fact that the Muslim thinkers did not look upon the Greek philosophers from the position of imitators; on the contrary, even though they respected them for their rational endeavour and achievements, they at the same time saw their errors and inadequacy in arriving at knowledge about the ultimate nature of reality through the effort of reason alone.¹²

The conception of knowledge, he declared, was of two kinds; divine knowledge (*al-'ilm al-ilāhī*) and human knowledge (*al-'ilm al-insānī*), the former being of a superior degree only given to prophets. Revealed truths at this level are self evident and as such cannot be receptive of demonstration. Within the context of human knowledge however, there are different degrees the most superior form being philosophy. Truths at this level may be grasped by human intelligence and as such are receptive of demonstration. Similarly, al-Kindī divides the sciences into two categories: divine science (*al-'ilm al-ilāhī*), and human sciences (*al-'ulūm al-insānīyyah*). By virtue of the fact that divine knowledge is only given to prophets, divine science is only possessed by prophets.

Let us now turn our attention to al-Kindī's division of philosophy which is constructed around the various modes of human knowledge. The primary mode is that of sense experience, through which the faculties of the senses apprehend external objects. This apprehension however is impermanent and requires the representative faculty, in

¹¹ *A History of Islamic Philosophy*, 69.

¹² The preceding quotation is from Professor Dr. Syed Muhammad Naguib al-Attas' welcoming address to participants of the International Conference on al-Ghazzālī's Legacy: Its Contemporary Relevance, held from the 24th-27th October 2002 at the International Institute of Islamic Thought and Civilization (ISTAC), Kuala Lumpur.

which a perceived object is preserved temporarily as a mental form before being committed to the retentive faculty, which then preserves its meaning. This primary mode is limited only to sensible particulars. Intelligible universals are known through rational cognition. Truths apprehended at this level and perceived through the faculty of reason, are *a priori*; in other words truths which are intuitively known.¹³ For rational cognition, the object of perception is the universal which is immaterial and therefore neither a representation of it nor a sense image corresponding to the phenomenological world is possible. Immaterial entities as such are apprehended intellectually.¹⁴ This distinction between the material and the immaterial serves as a propaedeutic to al-Kindī's conception of philosophy. According to him there are two aspects of philosophy; physics, and metaphysics, the latter of which is also referred to as first philosophy (*al-falsafah al-ūlā*). Both aspects are also called "the science of the movable and the immovable respectively",¹⁵ and "the science of the divine and created things".¹⁶ Fakhry states that "he appears to simplify the Aristotelian formula by recognizing two against Aristotle's three theoretical sciences".¹⁷ However, in our opinion, another possibility exists; namely, that al-Kindī is following the Quranic interpretation of things having a dual aspect, an outer (*zāhir*) and an inner (*bāṭin*) aspect.

Earlier we considered the fact that al-Kindī postulates knowledge of having two aspects, divine and human. In connection to this we have also mentioned the science of

¹³ Al-Kindī, "Kitāb al-Kindī 'ilā al-Mu'tasim billāh fī'l falsafah al-'Ūlā", *Rasā'il al-Kindī al-Falsafiyyah*, 107-109. The classification of the senses according to al-Kindī was later elaborated further by Ibn Sīnā. He discussed at great length the faculties of the senses which was instrumental in the development of his psychology and was ultimately reflected in his ontology. See also Majid Fakhry, *A History of Islamic Philosophy*, 71-72.

¹⁴ Some immaterial entities may "be associated with matter accidentally, and this might give rise to the illusion that they are susceptible of representation. Such, for instance, is the case with shape, which exists in conjunction with matter, and is nevertheless a purely rational concept, arrived at by abstraction and independently from the sensible object in which it inheres". Al-Kindī, "Kitāb al-Kindī 'ilā al-Mu'tasim billāh fī'l falsafah al-'Ūlā", *Rasā'il al-Kindī al-Falsafiyyah*, 108. See also, *A History of Islamic Philosophy*, 72.

¹⁵ *A History of Islamic Philosophy*, 72.

¹⁶ *Ibid.*, the former referring to metaphysics, the latter to physics

philosophy as having two aspects, both of which are receptive of demonstration (*burhān*). However, with regard to metaphysics, or first philosophy which is defined as knowledge of The First Real-True One (*al-Wāḥid al-Haqq al-Awwal*), by virtue of its being the cause of all Reality, demonstration cannot rely on rational propositions alone and must therefore transcend to the level of self-evident truths. This implies that unlike the Greek conception of knowledge which denies Revealed knowledge and relies principally on definitions arrived at through reason alone and then applied to all sciences equally, al-Kindī's conception relies on definition sometimes arrived at through reason while at other times through revealed knowledge.

On God, al-Kindī considers Him to be the First Real True One and the Eternal (*al-Qadīm*), the First Principle of all things. This One is not one conceived to be receptive of addition and subtraction, generation and corruption, a composite for this would assume the predication of a genus and a differentia, or contained within a clearly defined set of boundaries. Nor is it one predicated of a genus and species, or of non-existence and a cause other than itself, because God as such cannot be predicated of any created thing. He is not receptive of change otherwise that would imply that He is predicated of a genus which is impossible. Yet there is a contradiction with his conception of God. Earlier we have considered that al-Kindī argues for creation *ex nihilo* by the sheer act of Creation, yet God is conceived as being Necessary. The act of Creation implies that God must possess power, wisdom, and will. However, being Necessary denies God a will and this is where the contradiction lies.¹⁷

Al-Kindī's cosmological scheme is based in part on his opposition to the premise that a body could be infinite. If, he argues, one were to remove a finite part from an

¹⁷ Ibid.

¹⁸ This position would later be adopted by, in particular, Ibn Sīnā who refers to God as Necessary Agent. Al-Ghazzālī argues in his *Tahāfut* that this is in fact a contradiction in terms, employing logical premise to show that Ibn Sīnā uses terms which are mutually exclusive.

infinite whole, then that which remains must either be infinite or finite, but one already assumes the whole to be infinite. Therefore, when the finite part is conjoined once again to the infinite whole, the resultant body would either be greater or equal to its original magnitude. If the former is assumed, this would imply that infinite bodies are unequal whereas if the latter were assumed, this would imply that both the part and the whole are equal.¹⁹ This kind of argument employing the use of exceptive syllogism built upon conjunctive and disjunctive propositions extends to al-Kindī's opposition to the idea of infinite time, space, and motion. We do not need to concern ourselves here with an exhaustive elaboration of al-Kindī's ideas. We need only mention that he was by no means of the opinion that philosophy was superior to or even on par with revelation. He acknowledged the superiority of the Qur'ān, that philosophy "should simply surrender its claims to be the highest pathway to truth and be willing to subordinate itself as an ancillary to revelation."²⁰

In the tenth century (4th century AH), Muslim theologians (*mutakallimūn*) came to view Greek philosophy as suspect, as a way of thinking that seemed particularly alien. The intrusion of Greek logic and the Peripatetic sciences which sought to perceive a necessary nexus between cause and effect threatened Divine sovereignty. Any necessity posited for the created order was rejected by many Muslim theologians; accordingly, many embraced the Quranic interpretation of creation and causality which saw events in the created world as the acts of the one universal God. He alone is the true cause of all that happens. The position which these Muslim theologians feared can be found in the works of Abū Naṣr Muḥammad b. Muḥammad b. Tarkhān b. Uzlūgh al-Fārābī (258-339H/870-950CE) and al-Shaykh al-Ra'īs Abū 'Alī al-Ḥusayn Ibn Sīnā (370-428H/980-1037CE) which epitomizes the antithesis of the views of the theologians. Al-Fārābī for

¹⁹ Al-Kindī, "Kitāb al-Kindī 'ilā al-Mu'taṣim billāh fī'l falsafah al-'Ūlā", *Rasā'il al-Kindī al-Falsafīyyah*, 114. See also, *A History of Islamic Philosophy*, 74.

instance, established a curriculum devoted to the study of Plato and Aristotle, while the works of Ibn Sīnā, particularly in natural philosophy and metaphysics wielded extraordinary influence. Clearly the path in which Greek philosophical thought found its way into the Islamic world can be attributed to the works of these two masters.²¹

Al-Fārābī by all accounts was undoubtedly the most legendary philosopher, logician, linguist, and musician; such was his fame, due in large part to the wide influence his writings had later in the West. The attraction for him follows a trail of near mythic proportions. Much about the facts concerning his life as described by historians and admirers through the ages has undoubtedly been exaggerated, and only served to sensationalize his life well beyond the boundaries of historical truth. Consequently, and due in part to the difficulty of separating fact from fiction, much of the truth concerning his life remains mysterious. This apparent difficulty however, does not in any way repudiate the magnitude of his intellectual achievements enshrined in the many works composed by him.²²

Al-Fārābī's expertise in logic is perhaps a reflection of his teachers, one of whom was the Nestorian Christian philosopher Abū Bishr Mattā ibn Yūnus (d. 940CE).²³ His place in terms of contribution to the sciences has been firmly established by virtue of his expertise, thorough understanding and elucidation of logic. One of Abū Bishr Mattā ibn

²⁰ *A History of Islamic Philosophy*, 91.

²¹ See Ian Richard Netton, *Al-Fārābī and his School*, (Routledge: London and New York, 1992)

²² *Ibid.*, 4.

²³ During his time there appears to have been a debate concerning the merits of logic and Grammar. Abū Bishr maintained that logic is prior and superior to grammar. He was of the opinion that "the logician has no need for it (i.e. grammar) while the grammarian is very much in need of logic. For logic investigates the meaning, while grammar investigates the utterance. If therefore, the logician comes across the utterance this is a mere accident. Likewise, it is by sheer accident that the grammarian stumbles upon the meaning. And the meaning is nobler than the utterance, and the utterance is humbler than the meaning." A reply to this statement came from the philologist Abū Sa'id al-Sirāfi (d. 932CE) according to whom, "meanings are not transferable from one language to another but are bound up with utterances. Logic is one aspect of language. Both logic and grammar treat utterances. Logic is the right structure of language. Thus, since logic is understood as the 'logic of language', there is a 'logic of Arabic', and a 'logic of the Greeks'. But there is no universal logic any more than there is a universal grammar or universal

Yūnus' basic postulates concerning logic dealt with the difference between logic and grammar. He taught that logic and grammar were different; logic concerns itself with meaning, while grammar considers utterances.²⁴ For the Muslim logician it was more a question of priority or superiority of the one over the other.

In terms of al-Fārābī's epistemology, his classification of knowledge is twofold: namely that which embraces the corporeal, and that which addresses the non- corporeal. However, there is a third aspect; that which cannot be known, which can only be described in terms of what a thing is not.²⁵ The key, however, to al-Fārābī's epistemology lies in his sixfold division of reason (*'aql*) which for him is synonymous with intellect. The first division is moral prudence, a faculty characteristic of one whose actions are directed toward doing good.²⁶ This is followed by common sense, which is further enhanced by the third division, the faculty of natural perception described as:

The faculty of the soul which enables man to grasp the certainty (*al-yaqīn*) of some basic universal and necessary true principles. The faculty derives not from analogy or logical skills or thought but from one's own nature or, at the very least, arises in one's youth...Man is ignorant of from where or how this reason comes...it is a part of the soul (*juz' mā min al-nafs*).²⁷

The fourth faculty also associated with the soul and similar to the first faculty is described as the voice of conscience, the faculty by which good and evil is known to man²⁸. The fifth is subdivided again into four; first, the Potential Intellect. This is the capacity of abstracting the essences of forms of the objects of perception. These abstracted forms are thus the essences existing in the mind. This conception appears to

language". See Joel L. Kraemer, *Humanism in the Renaissance of Islam* (Leiden: E. J. Brill, 1986), 112-113.

²⁴ See Joel L. Kraemer, *Humanism in the Renaissance of Islam* (Leiden: E. J. Brill, 1986), 114-115.

²⁵ Ibid., 40.

²⁶ Ibid., 46.

²⁷ Ibid., 47.

bear some similarities with al-Kindi's definition of rational cognition.²⁹ Second, The Actual Intellect. This bears a connection to the first in that it is the representation of the essences of forms corresponding to them in reality. However as long as the object of perception is non-existent, its essence remains as an intellect in potentiality. The Acquired Intellect, the third subdivision, is able to comprehend "intelligibles abstracted from matter by the former Reason as well as the immaterial forms which this acquired Reason apprehends immediately".³⁰ The fourth subdivision, The Agent or Active intellect is identical with the emanationist Tenth Intellect. The Agent Intellect is free from both matter and form and will never be associated with either. It "is that principle which makes that essence which was an intellect in potentiality an intellect in actuality and which makes the intelligibles which are intelligibles in potentiality intelligibles in actuality".³¹ The sixth and final faculty in his division of reason is the First Principle (*al-'Aql al-Awwal*), and this leads into his ontology.

Essentially, the First Principle or, First Being or, the One generates everything in a continuous everlasting process of emanation. It is conceived as being Necessary, without partner, immaterial and undefined. Since it is not associated with matter it must be Intellect. The act of intellection by the First Being of itself gives rise to the first emanation which "is capable of conceiving both its author and itself".³² The ability of the first intellect to conceive of its author gives rise to the second intellect known as the outermost heaven.³³ The successive series of emanations by virtue of the prior intellect having the capability of conceiving of its cause terminates at the tenth intellect, and with each successive emanation of intellects the more elemental they become, the most basal

²⁸ Ibid.

²⁹ See footnote 13.

³⁰ *Al-Fārābī and his School*, 49.

³¹ Ibid

³² *A History of Islamic Philosophy*, 118.

³³ Ibid.

being the terrestrial region. The cycle of development now reverses the hierarchical pattern going from the most basal, prime matter, to the most noble, man.³⁴ It is clear from his conception of God and from the theory of emanation fashioned after the Neo-Platonists, that unlike al-Kindī who we remember conceived of God as being Necessary yet at the same time believed in the act of creation, al-Fārābī's conception was that the world was eternal, in essence denying God a will. "Necessary" meant that something in potentiality *must* become actualized simultaneously and therefore, the world must be eternal. This idea was certainly adopted from Aristotelian philosophy which dictates the eternity of the world based on such a premise.

In addressing the faculties of man al-Fārābī tacitly weaves "the conception of Reason as a faculty of cognition in man".³⁵ Admitted as "the ultimate pathway to happiness",³⁶ the attainment of such happiness concerns intellectual virtue which involves a journey through the various levels of cognition, employing the faculty of judgement along the way solely for the purposes of a pragmatic proficiency for the good in accordance with man's nature (*fiṭrah*); in view of this, practical virtue is exercised whose sole purpose is to carry out the dictates of the faculty of judgement, and finally terminating at the knowledge of God. The realization of true happiness depends on the Soul's ability to comprehend the immaterial nature of the Active Intellect. The fate of the Soul is also dependant upon this realization. Al-Fārābī argues that unless the Soul is able to comprehend the immaterial nature of the Active Intellect, it "will appear in one material condition after another, either endlessly, if they are fated to be reincarnated in human form, or until such time as they have degenerated by degrees to the bestial level,

³⁴ Ibid., 119.

³⁵ Ibid., 123.

³⁶ Ibid.

whereupon they will simply perish.”³⁷ Clearly on this point al-Fārābī’s views were radically antithetical to the Quranic doctrine denying the transmigration of Souls.

Abū Zakariyyā Yahyā b. ‘Adī ibn Ḥamīd b. Zakariyyā al-Takrītī al-Mantiqī (d. 363H/974CE) a Monophysite Christian, was a student of al-Farabī and Abū Bishr Mattā ibn Yūnus. We need only mention that he was of the same opinion as the latter in terms of the separability of logic from grammar perhaps for the same reasons stated earlier. With regard to his epistemology, logic was afforded the dual task of being a tool on the one hand, while on the other, a necessary prelude to the study of theology. Therefore, knowledge dependant on a correct and thorough appreciation of logic constituted deliverance from error and hence, to Paradise. In terms of this knowledge, what may be known and how it may be known rested on perception. Perception is then viewed as the path to logic. Yet perception is intrinsically fallable, hence, the same is also true of logic.³⁸ This apparent antinomy however, did not seem in any way to prejudice his belief in Christian doctrine. Indeed his pessimistic views on the fallability of perception as the primary tool of the intellect only strengthened his conviction towards the doctrine of original sin.³⁹

Although he had been al-Fārābī’s student his reaction towards the *mutakallimūn* and Islām in general were hostile. He was a renowned theologian whose claim to posterity in Islamic thought is by virtue of his polemical arguments with Muslim theologians of the time.⁴⁰ Both Ibn Abī Usaybi‘ah and Abū Ḥayyān al-Tawḥīdī make reference to Yahyā ibn ‘Adī with caution in one respect, contending that the latter did not always fully grasp the more esoteric meanings contained in certain metaphysical doctrines, while in other

³⁷ Al-Fārābī, *Al-Madīnah al-Faḍīlah*, (Beirut, 1959). Quoted from *A History of Islamic Philosophy*, 127. See also, Richard Walzer, *Al-Farabi on the Perfect State: Abū Naṣr al-Fārābī’s Mabādī’ Arā’ ahl al-Madīnah al-Faḍīlah*, (Oxford: Clarendon Press, 1985), 259-77.

³⁸ *Al-Fārābī and his School*, 57.

³⁹ *Ibid.*, 59.

respects both reserve unsolicited praise for Yaḥyā ibn ‘Adī.⁴¹ In defense of an anti-Trinitarian polemic composed by al-Kindī, he wrote a rebuttal entitled *Tabyīn Ghalaṭ Abī Yūsuf Ya‘qūb ibn Ishāq al-Kindī fī Maqālatihā fī’l Radd ‘alā’l Naṣārā*,⁴² which then perhaps became part of a larger polemic for subsequent discussions between Muslim and Christian theologians. His explanation and defense of the Trinity was heavily influenced not only by the Christian attribution of “blind” faith, but also by Aristotelian-Neoplatonic postulates with regard to the intellect.⁴³ In this respect, his concept of intellect owed “nothing to the tenfold emanationist hierarchy of his master, al-Fārābī”,⁴⁴ for clearly, his concept included a Trinitarian dimension. “In the period after Yaḥyā ibn ‘Adī, Christian disciples tended to adhere to Christian scholars, and Muslim disciples gravitated towards Muslim scholars.”⁴⁵ One possible exception to this rule was in the person of Abū Sulaymān Muḥammad b. Ṭāhir b. Bahrām al-Sijistānī al-Mantiqī (circa 300H/912CE-375H/985CE).⁴⁶

Al-Sijistānī, philosopher, scientist, and mathematician, bore the honorific title “philosopher of the Arabs”.⁴⁷ The *Siwān al-Ḥikmah*, composed by him, is perhaps the oldest known source concerned with the history of Islamic and Greek philosophical traditions, and therefore, is probably the first to identify five philosophers as the embodiment of the *Ikhwān al-Safā’*.⁴⁸ Due to the fact that a large number of his works are not extant, what we do know about him and his philosophical tradition may be gleaned

⁴⁰ *A History of Islamic Philosophy*, 196.

⁴¹ *Ibid.*, 8.

⁴² *Al-Fārābī and his School*, 10.

⁴³ *Ibid.*, 61-62.

⁴⁴ *Ibid.*, 63.

⁴⁵ *Humanism in the Renaissance of Islam*, 139-140

⁴⁶ These dates are given by Kraemer. See *Humanism in the Renaissance of Islam*. Netton offers a slightly different estimation although he too quotes Kraemer as his source basing his estimation of dates on Kraemer’s earlier work for his PhD thesis, see *Al-Fārābī and his School*, 11.

⁴⁷ *A History of Islamic Philosophy*, 68.

⁴⁸ *Ibid.*, 164.

through the *al-Muqābasāt* of his contemporary and companion Abū Ḥayyān al-Tawḥīdī.⁴⁹ Sijistānī objected to the attempts by the *Ikhwān al-Safā'* to harmonize religion and philosophy. The former aims at seeking proximity to God, while the latter only serves to contemplate creation. The ultimate aim of philosophy according to al-Sijistānī however, was knowledge. In this sense both sought the arrival of certainty. Contemplation on the one hand, led to the certainty of a creator. Both contemplation and the arrival of certain knowledge in the soul as a result, was a reflection of God's power, the recognition of which is also confirmed by religion. In this way piety and submission to Him are fostered. Al-Sijistānī's doctrine of the soul and its relationship to the body preoccupied him. For him, the soul "is a simple substance, independent of body; hence immortal."⁵⁰ He observes that "it is difficult for man to know the soul, for he can only know the soul by means of his soul, and he is veiled from his soul by his soul."⁵¹ What is interesting to note here is that according to Netton, al-Sijistānī, like his teacher before him thought of the soul in terms of a "tripartite" division. Netton concludes that both, al-Sijistānī and Yaḥyā ibn 'Adī, associated this tripartite division of the soul with the "Platonic doctrine of the tripartition of the soul corresponding virtues".⁵² In this regard are we sure that Yaḥyā ibn 'Adī was solely influenced by the Platonic doctrine concerning the tripartition of the soul, or could Christian doctrine also have had an influence on his doctrine? Earlier we have shown that Yaḥyā ibn 'Adī was duly influenced by Christian dogma. Similarly, we have shown in the introduction with regard to our general framework of the Western worldview that historically, the Christian church adopted Aristotelian Neo-Platonic postulates in order to legitimize their religion. If this is true, we may also conclude that

⁴⁹ *Al-Fārābī and his School*, 63. Unfortunately, such works were unavailable to us and therefore, we have had to rely upon the reports of Netton, Fakhry, and Kraemer.

⁵⁰ *Philosophy in the Renaissance of Islam*, 139. Since the body is compound, it is corruptible, hence finite. The soul on the other hand is simple and therefore, incorruptible. That which is corruptible cannot be part of a unity which is incorruptible, therefore the soul must be separate from the body.

⁵¹ *Ibid*, 226. See also *Al-Fārābī and his School*, 65.

⁵² *Al-Fārābī and his School*, 64.

his tripartite division of the soul was duly influenced by Christian dogma. But to what extent did his beliefs influence Al-Sijistānī? Was al-Sijistānī also convinced of the legitimacy of the tripartite division as interpreted by Yahyā ibn ‘Adī in the religious sense? Netton does not appear to be making such an implication, instead he says that al-Sijistānī was “also familiar with an Aristotelian tripartite division of the soul into the vegetative (*al-nāmiyyah*), animal (*al-ḥayawāniyyah*) and the rational (*al-nātiqah*).”⁵³ This has nothing to do with a tripartition of the soul corresponding virtues, because virtue, understood in Islām, implies that one must have knowledge. This knowledge is not the kind of knowledge found in either the vegetative or the animal soul. Indeed, it is the kind of knowledge that presumes reason, will, and intent; therefore virtues are particular to the rational soul of man. In order to correctly discern al-Sijistānī’s understanding of the soul, reference must be made in connection with his understanding of knowledge.

In reference to knowledge, al-Sijistānī proposes that the soul of man has a dual nature; bestial (*al-nafs al-shahwiyyah*) and rational (*al-nafs al-‘āqilah*).⁵⁴ In this context, he does not construct a tripartite division of the soul as alleged by Netton. Here it is clear that virtue cannot belong to the animal soul, for it does not possess the power of intellectual discernment, the power to interpret the meaning of reality and truth; nor does it aspire to seek ultimate happiness. The animal soul, as the name suggests, is concerned only with satisfying its appetitive desires, for its happiness is momentary and fleeting. Everything concerned with the animal soul is directed to the temporality of this world. Its task is simply to preserve the body, and is, therefore, subordinate to the rational soul. Hence, it is unclear what is meant by Netton. Does al-Sijistānī construct a tripartite division of the soul in terms of knowledge? Unfortunately, al-Sijistānī does not show if he has developed a hierarchy in terms of knowledge. We may only speculate that he did in

⁵³ Ibid.

⁵⁴ Ibid., 68.

fact develop such a hierarchy because according to him, knowledge belongs to the rational soul, and that knowledge is “the fruit or the yield of the intellect”.⁵⁵ Al-Sijistānī’s division of the intellect closely resembles the sixfold division envisaged by al-Fārābī, therefore, by virtue of this fact, there must also be a hierarchy in terms of knowledge. Once again however, it is not clear if this hierarchy is tripartite.

Although there may be some truth to Netton’s argument in terms of the fact that al-Sijistānī was duly influenced by Greek texts, we do not agree with the implication that those very texts were the fundamental basis for the development of his system.⁵⁶ We are convinced that al-Sijistānī could not have held the opinion of Yaḥyā ibn ‘Adī with reference to the tripartite division of the soul if in fact it was interpreted by the latter in the Christian dogmatic sense. We know this by virtue of his doctrine concerning the intellect which has authority over soul. “The intellect (*al-‘aql*)”, according to al-Sijistānī, “is the Caliph of God. It is the recipient of the pure emanation (*al-fayḍ al-khālīṣ*) which has neither blemish nor impurity. If one said that intellect were absolute light (*nūr fī l-ghāya*) one would not be far wrong.”⁵⁷ The analogy with reference to emanation, according to Netton, follows the “Neoplatonic dimension of al-Sijistānī’s thought”.⁵⁸ But what about the reference to light? We have previously mentioned that the aim of philosophy is contemplation, and this contemplation results in the arrival of certitude in

⁵⁵ Ibid., 69.

⁵⁶ This appears to be a common trend with the Orientalists, namely to deny originality to Islamic theoretical sciences. Every theory advanced by Muslims sciences, it is argued, has its roots in Aristotelianism, Platonism, Neoplatonism, was borrowed from the Plotinian school, or is ascribed to Philoponus (Yaḥyā al-Nahwī). A case in point, Nicholas Rescher, in the introduction to *Studies in the History of Arabic Logic* (Pittsburgh: University of Pittsburg Press, 1963), 13, states that “Arabic logic, like the rest of medieval Arabic science and philosophy is entirely Western (Italics are my own to show emphasis). We have mentioned in the introduction that this denies originality to Muslim sciences. We have further mentioned with regard to the worldview of Islām and of the ability of Islām to borrow from other cultures. In doing so however, the fundamental elements of the resultant sciences in Islām did not as a consequence adopt those same foundations, in this case Greek fundamental postulates. There was no need for Muslim scientists to do so because the fundamental elements which formed the basis of these sciences were already described by the worldview of Islām. Simply because Western sciences did not possess a legitimate worldview let alone a scientific tradition of their own without the influence of Greek thought does not presume the same to be true of Muslim scientific traditions.

⁵⁷ Ibid., 66.

the soul concerning God and is confirmed by religion. Since the intellect has authority over the soul, clearly then, this light would convey certitude to the soul through direct perception. The Qur'ān often uses the analogy of light as a clear manifestation to mean convincing proof concerning God.⁵⁹ Therefore, in light of al-Sijistānī's interpretation concerning the ultimate aim of philosophy, it becomes clear that his analogy of light does not follow an interpretation through the sieve of Greek Neoplatonic thought; rather it follows one born from an interpretation of Quranic doctrine.

Although al-Sijistānī was schooled in the Fārābian tradition, his opinions concerning philosophy differed with regard to prophecy and its relation to philosophy. Al-Fārābī taught that prophetic truth was actually the highest form of philosophy attained by virtue of a noetic synergy between the intellects of the prophets and the Active Intellect. In essence, prophets are philosophers of a superior rank. Al-Sijistānī did not agree with this conception, adopting instead an approach to prophecy which was akin to al-Kindī's conception. Prophecy, he maintained, is superior in rank to philosophy. The kind of knowledge attained by prophets is divine, therefore it is transcendental, acquired directly without the medium of human limitation. Knowledge acquired through philosophical means is speculative, and thus, limited. Indeed, that which is limited by reason cannot penetrate the realm of transcendental knowledge.⁶⁰

Ibn Sīnā's comprehension of God as Absolute Necessary Being, and the created order of existents that are in themselves only possible would later contribute to an understanding of creation in the West. According to Ibn Sīnā:

When some thing through its own essence is continuously a cause for the existence of some other thing, it is a cause for it continuously exists as long as

⁵⁸ Ibid.

⁵⁹ 4/al-Nisā', 174-175

⁶⁰ See *Philosophy in the Renaissance of Islam*, 242.

its essence continues existing. If it [the cause] exists continuously, then that which is caused exists continuously. Thus, what is like this [cause] is among the highest causes, for it prevents the non-existence of something, and is that which gives perfect existence to something. This is the meaning of that which is called 'creation' [*ibda'*] by the philosophers, namely, the bringing into existence of something after absolute non-existence. For it belongs to that which is caused, in itself, that it does not exist [*laysa*], while it belongs to it from its cause that it does exist [*aysa*]. That which belongs to something in itself is prior, according to the mind, in essence, not in time to that which comes from another. Thus, everything which is caused is existing after non-existing by a posteriority in terms of essence. . . . If [an effect's] existence comes after absolute non-existence, its emanation from the cause in this way is called *ibda'* ("absolute origination"). This is the most excellent form of the bestowal of existence, for (in this case) non-existence has simply been prevented and existence has been given the sway *ab initio*.⁶¹

Ibn Sīnā goes on to note the distinction between the ways in which metaphysicians and natural philosophers discuss causality with respect to creation:

. . . the metaphysicians do not intend by the agent the principle of movement only, as do the natural philosophers, but also the principle of existence and that which bestows existence, such as the creator of the world.⁶²

Ibn Sīnā's distinction between essence and existence is part of his intellectual contribution aimed at comprehending the intelligible natures of things. His sympathy for an emanationist scheme according to which all existents effuse from a primal source of Being betrays his ontological priority. His discussion with regard to necessary and

⁶¹ Ibn Sīnā, *al-Shifā' al-Ilahiyyāt*, vII. 266, quoted in Barry Kogan, *Averroes and the Metaphysics of Causation* (Binghamton: State University of New York Press, 1985), 276, n. 58.

⁶² Ibid., vI., 1, quoted in *Philosophy in the Middle Ages*, A. Hyman and J. Walsh (ed.), 2nd edition (Hackett, 1983), 248.

possible existent forms the crux of his distinction between essence and existence. In his system, essence is something prior and to which existence occurs as an accident.⁶³ 'Real existence' then emerges as something superadded to the contingent being prior to which was originally an essence or possibility in God's mind. Goodman observes:

The key to Ibn Sina's synthesis of the metaphysics of contingency with the metaphysics of necessity lies in the simple phrase: *considered in itself*. Considered in itself, each effect is radically contingent. It does not contain the conditions of its own existence; and, considered in itself, it need not exist. Its causes give it being. It is by abstracting from its causes that we can regard even the world as a whole as radically contingent. But considered in relation to its causes, not as something that in the abstract might not have existed, but as something concretely given before us, with a determinate character, the same conditionedness that required us to admit its contingency requires us to admit its necessity. Considered in relation to its causes, this object must exist, in the very Aristotelian sense that it does exist, and must have the nature that it has in that its causes gave it that nature. A thing might *have been* other than as it is, it might yet be other than it is, but it cannot *now* be other than it is.⁶⁴

For Ibn Sīnā the world is conceived as being both eternal and necessary, not something subject to His act of creating by free will. In doing so he sought to assert contingency of the created order.⁶⁵ The world proceeds from God by necessity and is eternal, however it is only possible in itself and requires a cause in order to exist. On the other hand, God is Necessary in Himself and, hence, is not in need of a cause. Aristotle explains in the *Posterior Analytics* that knowledge truly deserving of the name science is the knowledge of a necessary nexus between cause and effect.⁶⁶ That existence which is not necessary in itself but necessary by something other than itself is known as contingent

⁶³ David Burrell, "Aquinas and Islamic and Jewish Thinkers", *The Cambridge Companion to Aquinas*, Norman Kretzmann and Eleonore Stump ed. (Cambridge: Cambridge University Press, 1993), 69.

⁶⁴ Goodman, *Avicenna*, (London: Routledge, 1992), 66-67.

⁶⁵ *Ibid*, 63.

existence which, in Ibn Sīnā's view, did not contravene the idea of natural necessity. In relation to God then, finite existents while contingent in themselves, are necessary with reference to their causes, for without this necessary nexus the world of created things would remain unintelligible. However an admission that the world is one created by God was undeniable, for if the opposite were assumed, namely that the world was a product of necessity, then a further assumption with regard to its self sufficiency must be postulated, and this is impossible. The possibility of a necessary world must needs an assumption that it issues from a primal source whose being is eternal (*qadīm*). Hence, the theory of emanation appeared to justify the arguments pertaining to the absolute origin of the world, since it addressed both problems of necessity and contingency.

Ibn Sīnā held that creation was an ontological problem having admitted that the theory of emanation is only possible within the framework of an eternal universe. What is meant by an ontological problem is one where the order of being has no reference to temporality. In addition, the theory of emanation denied God a free will. In essence, Ibn Sīnā much like al-Fārābī opposed the idea of creation preferring instead an emanationist conception. It was precisely this irreconcilable conception held by Ibn Sīnā that led to the attack on his philosophy by Hujjat al-Islām Abū Ḥāmid Muḥammad b. Muḥammad b. Muḥammad al-Ghazzālī al-Ṭūsī (450-505H/1058-1111CE).

Al-Ghazzālī was a jurist, theologian, philosopher, and mystic. Indeed, it was he who answered the call of Islām to defend against what were considered to be attacks aimed at the very core of the fundamental elements of the religion. In his monumental work, *Tahāfut al-Falāsifah* (the Incoherence of the Philosophers) which represents a refutation of philosophy in general, he outlined twenty points of contention with the philosophers; three of which were deemed irreligious for he says:

⁶⁶ *The Complete Works of Aristotle*, Jonathan Barnes ed. (Princeton: Princeton University Press, 1995), v. 1,

To brand the philosophers with infidelity is inevitable, so far as three problems are concerned—namely (1) the problem of the eternity of the world, where they maintained that all the substances are eternal. (2) their assertion that Divine knowledge does not encompass individual objects (3) their denial of the resurrection of bodies. All these three theories are in violent opposition to Islām. To believe in them is to accuse the prophets of falsehood, and to consider their teachings as a hypocritical misrepresentation designed to appeal to the masses. And this is blatant blasphemy to which no Muslim sect would subscribe.⁶⁷

In his *al-Munqidh min al-Ḍalāl* (Deliverance from Error) al-Ghazzālī reiterates his conviction with regard to the infidelity of the philosophers saying:

In the three questions. . . they [the philosophers] were opposed to [the belief] of all Muslims, viz. in their affirming (1) that men's bodies will not be assembled on the Last Day, but only disembodied spirits will be rewarded and punished, and the rewards and punishments will be spiritual, not corporeal . . . they falsely denied the corporeal rewards and punishments and blasphemed the revealed Law in their stated views. (2) The second question is their declaration: 'God Most High knows universals, but not particulars.' This also is out-and-out unbelief. . . (3) The third question is their maintaining the eternity of the world, past and future. No Muslim has ever professed any of their views on these questions.⁶⁸

Al-Ghazzālī regarded Ibn Sīnā's adherence to the idea of an eternal world as opposed to that of creation to be the antithesis of the sacrosanct tenets of Islām. An eternal world, he proposed, is completely independent of God's will since it is by definition self sufficient. In addition God cannot be Necessary Agent because an agent by definition requires will, whereas Necessary by definition does not. Therefore the two, Necessary and Agent, are in fact a contradiction and this is impossible in reference to

114-166.

⁶⁷ Sabih Ahmad Kamali, *Al-Ghazali's Tahafut al-Falasifah* (Lahore: Pakistan Philosophical Congress, 1963), 249.

⁶⁸ Al-Ghazzālī, *al-Munqidh min al-Ḍalāl*. Quoted from Lenn E. Goodman, *An Introduction to Medieval Islamic Philosophy*, 20-21.

God. Similarly al-Ghazzālī professes that, even on philosophical grounds, all the arguments advanced for an eternal world fall short and are therefore devoid of meaning. We have shown that Ibn Sīnā believed the world to be eternal and yet simultaneously created, yet not posterior to God in time but rather co-existing with God. In reply, al-Ghazzālī argues that what is meant by a created world is one that has an absolute temporal beginning. Understood in this context, it is not possible for God and time to be co-existent for if time had an absolute beginning, then this would by implication mean that God also has an absolute beginning, and this is absurd. More importantly, the world cannot be both eternal and created, as argued by Ibn Sīnā, that which is created implies an absolute beginning whereas that which is eternal does not. Therefore this too is absurd.

The philosophical ideas summarized thus far offer a brief outline with regard to the intellectual milieu ready for al-Abharī to assimilate. Within this intellectual tradition, it is clear that he chose the Mashshā'ī approach of Ibn Sīnā in his book the *Hidāyat al-Ḥikmah*. In our brief outline we have made reference to the most influential figures only. From amongst them it was Ibn Sīnā which he chose to model his philosophical system after. Al-Ghazzālī also produced a work within the same tradition, viz his *Maqāṣid al-Falāsifah*. But this work was written with a different purpose, namely, one which did not claim to profess his own ideas but rather to summarize and elucidate the ideas of the philosophers. However, it will be both consistent and appropriate to consider the aforementioned work as well as Ibn Sīnā's well known shorter treatise entitled '*Uyūn al-Ḥikmah*' for a comparative study in this context in order to show the place of the *Hidāyat al-Ḥikmah* in Islamic philosophical literature. Subsequently, we shall attempt a textual analysis of the *Hidāyat al-Ḥikmah* in order to disclose its relevance for al-Abharī's intellectual heritage.

CHAPTER TWO

THE SIGNIFICANCE OF THE *HIDĀYAT AL-ḤIKMAH* IN ISLAMIC PHILOSOPHICAL LITERATURE

We have previously concerned ourselves with a historical approach simultaneously considering the philosophical perspectives of selected giants of philosophy within a defined period. In view of the aforementioned summary it is relevant to address the significance of the present work under consideration in connection to other works of the same tradition. In this regard, two books can be distinguished for comparison: the '*Uyūn al-Ḥikmah*'¹ composed by Ibn Sīnā, and the *Maqāṣid al-Falāsifah*² composed by al-Ghazzālī. In this section we shall try to compare the *Hidāyah al-Ḥikmah* mainly with these two books and show its place in the Islamic philosophical literature. Our comparison is not going to be a detailed analysis of subjects discussed in these works, but rather a brief overview of these subjects in order to exhibit how the *Hidāyah* developed out of this kind of philosophical literature. We shall carry our discussion according to the main divisions of the *Hidāyah* which is also used by the two works in question.

According to 'Abd al-Raḥmān Badawī³, the '*Uyūn al-Ḥikmah*' was originally entitled *Kitāb al-Mūjaz* but due to its increased exposure and fame the book became commonly known and referred to as the '*Uyūn al-Ḥikmah*'. The circumstances whereby Badawī arrives at this conclusion are unknown, yet the outcome of his evaluation is that Ibn Abī Usaybi'ah mistakenly referred to both titles as two separate compositions.⁴ While it is true that Ibn Abī Usaybi'ah refers to both as two separate works, the complete title

¹ It is not clear when this book was written. Our reference for this purpose was the book bearing the same title containing a forward written by 'Abd al-Raḥmān Badawī, published by Dār al-Qalam, Beirut, 1980.

² We are using the edited version bearing the same title published by Dār al-Ma'ārif, Egypt, 1961.

³ He wrote the foreword to Ibn Sīnā's text mentioned above in footnote number one.

mentioned by him with regard to the former composition is *Kitāb al-Mūjaz al-Kabīr*, a work particular to the study of logic. It is possible however, that only the section on logic contained in the '*Uyūn* was identical with the contents of the aforementioned work perhaps owing to its being composed earlier. Equally possible, is that the treatise on logic from the latter composition was removed then renamed *Kitāb al-Mūjaz al-Kabīr*, intended for use in the *madrasah* or some other medium of instruction, as a propaedeutic to the study of the theoretical sciences. It is thus reasonable to infer that this composition was in fact a work comprising just the first part of the '*Uyūn*, which incorporates a collected compilation of all three sciences. Hence, Ibn Abī Usaybi'ah is correct in his assessment.

The *Hidāyah* is divided into three traditional and philosophical sciences; on logic, physics, and metaphysics. What concerns us is why all three compositions are compiled in such a way, in other words logic is followed by physics which precedes metaphysics. According to Ibn Sīnā, logic is a pure and formal science and a way of extracting the unknown from the known.⁵ The knowledge derived from the science of logic, by virtue of its purity, is certain.⁶ The method with which knowledge may be acquired and inquiry into the kinds of knowledge to be explored may be defined. Physics and metaphysics are classified as being theoretical sciences but not formal and as such are dependant upon logical analysis. As far as the former is concerned, it is the study of things in Nature dependant upon sensual perception, whereas the latter is outside the realm of Nature and is thus absent from the faculties of the external senses. Let us now examine the divisions

⁴ See Ibn Abī Usaybi'ah, '*Uyūn al-Anbā' fī Ṭabaqāt al-Aṭibbā'*', August Müller ed., (London: Gregg International Publishers Limited, 1972), 19.

⁵ See Farhang Zabeeh, *Avicenna's Treatise on Logic (Part One of Danesh-Name Alai)*, (The Hague: Martinus Nijhoff, 1971),

⁶ Certainty, by virtue of its definition requires that it be free from doubt. The position adopted by Ibn Sīnā is one in which truths can be known logically, hence his detailed preoccupation with logic both as a science in terms of affording its possessor the ability to judge, and as an instrument common to all sciences. Consequently, philosophy by virtue of its arguments and premises adhering to logic as a science, must also profess knowledge that is certain. The view that certainty could be achieved through logic and demonstration alone was completely rejected by al-Ghazzālī. For him, certainty with regard spiritual matters could only be reached not by reason but by immediate experience. See al-Ghazzālī's *al-Munqidh*

of sciences discussed in the *Hidāyah* in relation to a few works of the same genre composed by al-Abharī's significant predecessors.

1. Logic

The entire section on logic in the *'Uyūn* is divided into two subdivisions; we will call the first one Doctrine of Definition comprising two chapters, the second one is on Syllogism comprising seven chapters. Accordingly we will begin with the Doctrine of Definition. As an introduction to the first chapter, Ibn Sīnā begins by defining an expression, or term (*al-lafz*). Citing examples for each, he goes on to formulate by virtue of this definition, that an expression may be singular, compound, universal, or particular. This is then followed by a brief definition of the essential universal and the accidental universal expressions. He continues defining that which is said in answer to the question "what is it?" and that which is said in answer to the question "what kind of a thing is it?"; classifying the five predicables in relation to the two types of queries.⁷ The *Maqāsid* also contains a prologue

min al-Dalāl. See also W. Montgomery Watt, *The Faith and Practice of al-Ghazzālī*, (London, 1953), 54-55

⁷ An essential universal is that which is included in the reality of its particulars, as for instance, 'animal' in relation to 'human' and 'horse'. If it is said in answer [to the question] "what is it?" solely with regard to its participation; as for instance 'animal' with regard to 'human' and 'horse'; then it is [called] 'genus' (*al-jins*). It is described as a universal said of many different realities in answer [to the question] "what is it?". If it is said in answer [to the question] "what is it?" with regard to participation and particularization, as for instance, 'human' in relation to 'Zayd' and 'Umar', then it is [called] 'species' (*al-naw'*). It is described as a universal said of many things differing in number but not in reality in answer [to the question], "what is it?". If it is not said in answer [to the question] "what is it?", but rather said in answer [to the question] "what kind of a thing is it in its essence?" (*dhāt*); which is that which distinguishes the thing from its participants in the genus, as for instance, 'rational' with regard to 'humans', then it is [called] 'differentia' (*al-fasl*). It [i.e. differentia] is described as a universal said of a thing in answer [to the question], "what kind of a thing is it in its essence?" Each accident [i.e. concomitant and separable accidents] either particularizes or generalizes. If it [i.e. an accident] is peculiar to the same verity, it is called 'property' (*al-khāssah*), as for example, 'laughter' in potentiality and in actuality with respect to 'humans'. It is defined as a universal said, as an accident, of that [which is classified] under one verity (*ḥaqīqah*) only. If it generalizes verities above one species, it is called general accident, as for example, 'one who breathes' in potentiality and in actuality with respect to 'humans' and other members of the animal species. It is defined as a universal said, as an accident, of those [classified] under different verities. The predicables therefore are five: genus, species, difference, property and general accident. See al-Abharī's *Hidāyat al-Hikmah*, on expressions. See also al-Abharī's *Isāghūjī fī'l Mantiq*, translation my own.

as an introduction to the first science (*al-fann*) offering a detailed discussion on the definition of logic, including an analysis of conceptions and assents, its benefits, followed by its divisions. The *Hidāyah* on the other hand does not offer an introduction, resorting instead to confront the subject immediately, beginning with the first chapter. However, the *Hidāyah* does bear a remarkable resemblance to the '*Uyūn* in the sense that it is arranged in similar fashion, comprising two chapters followed by the section on syllogism. The section on syllogism is further supplemented by 'guides' which, as we have previously mentioned, indicate al-Abharī's own reflections.

The first chapter of the '*Uyūn* discusses expressions or terms corresponding to existent things. These expressions either denote a substance whose existence is dependant upon the existence of something else, or is dependant upon a quality, quantity, or relation. Each category is explained in brief supported by their corresponding examples. In essence, Ibn Sīnā is discussing the Ten Categories. Similarly, the *Hidāyah* begins the first chapter discussing denotation but unlike the '*Uyūn*, a discussion on the five predicables is incorporated into this chapter citing clear examples for each. Similarly, the *Maqāṣid* devotes the first science to denotation but unlike the other two compositions arranges denotation according to six parts which is dealt with in the first division. The second division is on singular and compound expressions, while the third is a discussion on the universal and particular expressions. Unlike the '*Uyūn* and the *Hidāyah*, the *Maqāṣid* discusses the classifications of an expression as either a verb, a noun, or a letter, followed by an elucidation of expressions in terms of their meaning which is discussed in the sixth division.

Chapter two of the '*Uyūn* discusses the pendants of speech. Included in this division is a concise definition of the types of propositions and the conditions of each whereby it may be known if the one who utters a speech can be identified as telling the truth or otherwise. Also defined are the three aspects of a proposition, referred to as

necessary, possible, and impossible. Each argument is supported by clear, concise examples. This is followed by a definition of conversion, completing the Doctrine of Definition. The *Hidāyah* makes the distinction between a definition (*al-hadd*) and a description (*al-rasm*), citing examples to show the distinction between the two. Then al-Abharī briefly discusses the different kinds of propositions, citing examples for each, followed by contradiction, conversion and syllogism. All the four subjects are referred to as guides.

With reference to syllogism, al-Abharī constructs three other subdivisions, also bearing the title guides. The first briefly discusses the kinds of syllogism, four figures of a syllogism and their conclusive moods, citing examples. The second guide is on demonstration of absurdity, demonstration, enthymeme⁸, dialectic argument, rhetoric, poetry, and finally sophistry. The third guide is dedicated solely to fallacy, and here the section on logic ends. All guides are discussed very briefly citing examples. The treatment of each subject does not follow any particular method, in truth it is rather haphazard and unsystematic although it is obvious that the content is derived in large part from Ibn Sīnā's *'Uyūn*.

As an introduction to the second subdivision, on syllogism, which is divided into seven chapters, Ibn Sīnā defines the two types of syllogism.⁹ This is followed by the first chapter, a brief exposition concerning the parts of a syllogism, including mention of the figures of a syllogism. Of these, he mentions only three without considering the fourth. This is because he does not consider the fourth figure to be scientific.¹⁰ The examples

⁸ *Al-Damīr* A kind of syllogism in which one of the premises or the conclusion is not explicitly stated. Hence the missing premise is made by inference.

⁹ i.e. conjunctive and repetitive syllogisms.

¹⁰ According to ibn Sīnā, the first figure "...had been found perfect with much goodness...". See *Ibn Sīnā Remarks and Admonitions, Part One: Logic*, Shams C. Inati trans. (Toronto: Pontifical Institute of Medieval Studies, 1984), 134. This is because the conclusion in the first figure is necessary whereas the second premise in the other figures is inferred by the mind naturally. Therefore the first figure is thus scientific and called *al-burhān* (demonstrative proof).

cited tend to be tedious, however in no way does this detract from the lucid manner in which they are presented. Conversion is also dealt with albeit briefly. Chapters two through seven discuss repetitive syllogism: demonstration of absurdity, induction, and analogy, and enthymeme, defines propositions and demonstrative syllogism, fallacy, rhetoric, poetic syllogism, and the relation of predicate to subject, respectively. The final chapter concludes the section on logic.

Al-Ghazzālī's *Maqāṣid* on the other hand, is very methodical, deliberate, and elaborate¹¹. Apart from the fact that it has a completely different organization, discussion on propositions and rules pertaining to them are vastly elaborated on, comprising three sciences. Only in the fourth science does the definition and elaboration of syllogism ensue. Three figures of syllogism are dealt with, uncovering the minutest details followed by a close examination of the categorical, and the repetitive syllogism. In addition the conclusive moods of each figure enjoy an extremely detailed, analytical exposure supported by clear examples. While not featured in the *Hidāyah*, both the *Maqāṣid* and the *ʿUyūn* discuss induction (*al-istiqrāʾ*), analogy (*al-tamthīl*), and polysyllogism (*al-qiyās al-murakkab*). All concern the form of syllogism and the rules pertaining to each. The matter of syllogism is also discussed at great length. Once again the distinction between form and matter in regards to syllogism is only dealt with in the *Maqāṣid*. Al-Ghazzālī's method is very systematic. The entire corpus on logic is precisely defined. The section on logic ends with the appendices of syllogism and on demonstration, which is of great importance to the application of correct method in the remaining theoretical sciences.

¹¹ Al-Ghazzālī has shown a general distaste for prolixity as is evident in his condemnation of the heresies of the philosophers. See his *Tahāfut al-Falāsifah*, Sabih Ahmad Kamali, (Lahore: Pakistan Philosophical Congress, 1963), 13. One therefore should not misinterpret the extent of elaborations presented in the *Maqāṣid* as one of prolixity. Al-Ghazzālī merely intends to leave no stone unturned, that the student may master the science and hence be impervious to attack from a corrupted form of logical argument.

In general, if one were to classify these three works with respect to logic, it is clear that the *Hidāyah* is the most simplified and unsystematic compilation; the *‘Uyūn* on the other hand is more lucid and systematic. One may propose, based on our comparison, that both texts were employed as textbook manuals in the *madrasah* system. Conversely, the *Maqāṣid* is an extremely detailed albeit lucid work with more in common with the *‘Uyūn* only in terms of subject matter discussed. The *Maqāṣid* is nonetheless radically different in terms of intent in that it was probably not meant as a textbook manual but rather as an elaboration intended as a study in order that the reader familiarize himself with the details of logic, physics, and metaphysics before attempting to understand the conceptions and arguments of the philosophers, Ibn Sīnā and al-Fārābī in particular.

2. Physics

It must be noted that both the *Hidāyah* and the *‘Uyūn* follow the same arrangement, namely beginning with logic, followed by physics, then concluding with metaphysics. However, the *Maqāṣid* is compiled a little differently, namely beginning with logic, followed by metaphysics, then concluding with physics. The emphasis of our comparative study is less concerned with the arrangement of the divisions of the theoretical sciences, hence any conclusions to be drawn from this intentional sequence on the part of the authors will be presented at the end of the section.

In the introduction we have mentioned that the section on physics in the *Hidāyah* is composed of three divisions, each comprising ten, eight, and six chapters, respectively. The ten chapters of the first division are intended to acquaint the reader with abstract physical conceptions, while the eight chapters of the second division discuss mechanics. The final division may be subdivided into two parts: the first three chapters deal with meteorological phenomena, while the remaining three chapters discuss issues related to organic matter. The *‘Uyūn* generally bears the same kind of classification, yet unlike the

Hidāyah the section on physics is not arranged according to divisions. It comprises sixteen chapters; the first eight bear the hallmark of abstract conceptions, while the last five chapters devote attention to organic matter. With regard to the *Maqāṣid* the chapters are not referred to as such but rather as discussions. There are ten discussions in all. The first four discussions address abstract mental conceptions, while the last five are discussions concerned with organic matter. In addition, the last four discussions address the faculties peculiar to man.

There are certain differences in each of the three texts with regard to priority. Al-Abhārī's *Hidāyah* begins the first chapter of the first division with a discussion concerned with a refutation of the indivisible particle,¹² followed by a discussion concerning the composition of corporeal bodies. Chapter three, four, and five are in fact subdivisions of chapter two: all pertain to the composition of corporeal bodies. This is deliberately done in an attempt to proceed from the more abstract to the less abstract. The *Maqāṣid* of al-Ghazzālī begins with a division on that which is common to bodies enumerating form, matter, movement, and place. In similar fashion, the reader, based on the definitions of the various compositions relating to corporeal bodies is systematically guided in a procession from the more to the less abstract. The *ʿUyūn* of Ibn Sīnā on the other hand begins with epistemology. His definition of knowledge and its divisions clearly indicates that he attempts to elucidate the kinds of knowledge to be derived from the natural sciences and to what extent natural phenomena may be known in relation to man. It is a systematic, methodical, logical attempt in defining the parameters, or limits of knowledge. This discussion is also intimately connected to the previous section on logic.¹³

¹² In the following section we will be analyzing the ideas argued by al-Abhārī. Presently we are interested in contrasting the prioritization of subject matter with regard to al-Abhārī, Ibn Sīnā, and al-Ghazzālī.

¹³ This is generally the trend in Islamic philosophical sciences. Emphasis is placed on understanding logical rules and principles before embarking on a discussion concerning the other theoretical sciences. Since logic is concerned primarily with correct thinking derived from speech (*nutq*), it is only natural to inquire into it first.

We are reminded of the role assigned to logic¹⁴, as being a tool applied to thought in order that conclusions derived from correct thinking will lead to the truth. Armed with this knowledge the reader is then capable of identifying the kinds of knowledge to be inquired about. Forsaking this, the implication is that the search for knowledge according to the classifications afforded would be a futile exercise attempted only by the feeble minded.

The other recipient of priority, in terms of subject matter, is the discussion on man. The method of arrangement in all three texts is comparatively similar. All discuss man in the last chapter of the section. The *Hidāyah*, as do the other two, discusses the faculties of the soul in man, with regard to the intellective faculty. Al-Abharī discusses them in relation to the faculties of the rational soul of man, hence one may assume that these topics are intended as a subdivision classified under the chapter on man. In general all the ideas are a reflection of Ibn Sīnā's philosophy, albeit a much abridged version. Again, this is indicative of the book's pragmatic utility.

We have considered the similarity between the *Hidāyah* and the '*Uyūn*. The latter devotes the longest chapter to the discussion concerning man. Included in this chapter are the perceptive faculties of man, defined and discussed at length. In this sense, the *Hidāyah* is similar to both the *Maqāṣid* and the '*Uyūn*. The *Maqāṣid* in comparison considers the faculties of the human, animal, and vegetative soul in the fourth discussion. The remaining two discussions concern man alone and consider the perceptive faculties of man in similar fashion to the '*Uyūn* albeit more elaborated. The point of interest, lies in the discussion contained in the *Hidāyah*. At the very last of the chapter, al-Abharī alludes to the fate of the soul, as prelude to his eschatology found in the conclusion to the third

¹⁴ As far as the classification of logic as a science or an art; in general, Muslim philosophers did not consider it as being of paramount importance. Unlike Greek philosophers in general, and Aristotle in particular, who appeared bewildered with regard to logic's assignment, Muslim philosophers sometimes called logic an art esp. with regard to poetry; at other times logic would be regarded as a science esp. with regard to demonstration (*al-burhān*); and at other times simply as a tool reflective of the machinations of the mind.

part on metaphysics. This is also to be found in the *Maqāṣid* where al-Ghazzālī hints at the fate of the soul towards the last discussion. Why do al-Abharī and al-Ghazzālī include a casual reference to eschatology as part of the natural sciences? In the case of al-Abharī the reference is made in order to justify his arguments in the following chapter of the *Hidāyah* where his eschatology is outlined in brief. Al-Ghazzālī on the other hand is simply reiterating what was said with regard to eschatology in the previous chapter; we are reminded here that the chapter arrangement in the *Maqāṣid* follows a slightly different classification where the discussion on metaphysics comes before the discussion on physics. In answer, one may simply postulate that they do so because this points to the ultimate destiny of all natural phenomena.

Chapters eight and nine of the *‘Uyūn* discuss the concepts of time and the principles of movement respectively. Both chapters are relatively long. These correspond to chapters nine and ten of the first division in the *Hidāyah*, and to the second discussion in the *Maqāṣid*. These discussions are instrumental in the *mashshā’ī* philosophical scheme as they represent part of the nascent core to an ontological scheme. In the first part of chapter two we have made reference to the ontological constructs of Ibn Sīnā, laying bare the fundamental assumptions by which such an ontology is constructed. We are reminded of the arguments concerning the eternity of the world and his position on creation *ex nihilo*. The basis for such arguments are due in part to the philosopher’s assumptions with reference to God and His attributes, which are then imposed on premises with regard to the world. It now becomes clear why al-Ghazzālī, perhaps deliberately, arranged the *Maqāṣid* following the method alluded to earlier.

3. Metaphysics

The section on metaphysics reveals the philosopher’s theology. The *‘Uyūn* comprises five chapters, by far the shortest of the three compositions, yet in these five chapters Ibn Sīnā

manages to convey his ontology encompassing all that is discussed in the three sciences of the *Hidāyah*. In the first chapter for instance, the '*Uyūn* defines metaphysics in terms of the divisions of existence. This corresponds to the first five chapters of the first science in the *Hidāyah*. In addition, the *Hidayah* is almost identical with the *Maqāṣid* in terms of how the section is classified. The *Maqāṣid* begins with the divisions and laws of existence, yet the *Maqāṣid* in keeping with the exacting keen genius of its author, is much more elaborate. This is testimony to the thorough knowledge possessed by al-Ghazzālī in understanding the philosophical ideas of the Greek masters and the philosophers of the *mashshā'ī* tradition.

The section on metaphysics in the *Hidāyah* is tripartite. The first of these divisions is concerned with al-Abharī's ontology on the divisions of existence. There are seven chapters in all. Each chapter is consistent in the sense that al-Abharī deliberates about existence systematically adopting complementary pairs, for instance universal and particular, substance and accident, potentiality and actuality and so on. Similarly, the *Maqāṣid* adopts a deliberate method beginning with a division of the sciences. This is done in response to the '*Uyūn*. As we have mentioned, the '*Uyūn* begins with a definition of metaphysics. Hence al-Ghazzālī first defines that which may be classified as a science, then defines the subject matter for these sciences which have been narrowed down to three, physics, mathematics, and metaphysics.¹⁵ In comparison with the *Hidāyah*, the *Maqāṣid* discusses the refutation of the indivisible particle in the section concerned with metaphysics. This does not however mean that Ibn Sīnā and al-Abharī were ignorant with regard to which classification the indivisible particle belonged. Clearly, the *Maqāṣid* does not explicitly mention the indivisible particle as being particular to the study of metaphysics. The *Maqāṣid* discusses this particular topic as a revision of physics. It

¹⁵ It is clear from the above classification that al-Ghazzālī does not consider logic to be a science. For him logic is more of a way of thinking correctly.

discusses the indivisible particle in purely physical terms, as an abstract notion to be understood only in relation to perceived things in the world of nature. Since the section on physics is discussed in the last section of the *Maqāṣid*, the reader is required to familiarize himself with physical conceptions and hence, al-Ghazzālī begins the discussion on metaphysics with an introduction to the more salient conceptions applicable to the physical sciences. Comprehension of these conceptions is fundamental to the subsequent ontological foundations deliberated in *mashshā'ī* metaphysics.

The second science in the *Hidāyah* concerns al-Abharī's theology. This section clearly classifies al-Abharī as being an essentialist. We shall deliberate on this point in greater detail in the subsequent chapter. He posits God as being Necessary and simple, which in turn implies that He is also immutable and without a will, a point al-Ghazzālī, in the *Tahāfut al-Falāsifah*, is vehemently opposed to. In general, al-Abharī's position is similar to Ibn Sīnā. The *Uyūn* is typically brief and concise, limiting the discussion by carefully summarizing Ibn Sīnā's theology without being verbose. The *Maqāṣid* in contrast, is methodical carefully laying bare the foundations of the philosophers beliefs, addressing every avenue of thought in order that the reader grasp the axis of ideas. Al-Ghazzālī begins by carefully drawing on the fundamental physical elements gradually, and then builds upon these elements before culminating in an ontological and theological opinion concerning God as interpreted by the philosophers.

The differences between the *Maqāṣid* and the *Hidāyah* are once again apparent in the discussion on heavenly bodies which we will call cosmology. The *Hidāyah* discusses this chapter in the section on physics, whereas the *Maqāṣid* makes reference to them in the section on metaphysics. Since what is referred to is explicit to the emanationist theory, al-Ghazzālī elaborates on the physical properties of heavenly bodies in much the same fashion alluded to earlier.

The last paragraph of the last chapter in the *‘Uyūn* makes casual reference to the eschatology of Ibn Sīnā. The *Hidāyah* offers a more elaborated discussion concerning the fate of the soul. The *Maqāṣid* makes no mention of it at all. In this sense al-Abharī is more elegant; the entire eschatological scheme is conceived as his own thoughts on the matter, although they are undoubtedly influenced in large part by Ibn Sīnā who held the same opinions. This section represents his concluding remarks in the *Hidāyah*. In essence he affirms the immortality and incorruptibility of the soul, and denies the possibility of transmigration; pain in relation to the soul is conceived as being a result of the soul’s subservience to the corporeal body. Real pleasure is achieved when the body dies at which time the individual soul is freed from the shackles of material coexistence.

To summarize, the *Hidāyah* was surely meant as a textbook manual for use in the *madrasah* system. In some areas it lacks lucidity in an otherwise methodical composition. The section on logic in particular, is at times presumptuous without affording adequate elaboration. Al-Abharī was obviously so well versed in logic that he did not dwell on certain concepts long enough to afford the reader adequate comprehension of those very concepts. This is perhaps another reason why the treatise on logic was later removed from the complete manual and his *Īsāghūjī fī’l Mantiq* was preferred. In the Introduction we made mention of the fact that the *Īsāghūjī* appeared to be a later composition; the point we have just made only serves to strengthen our argument. In the section on physics al-Abharī appears to ignore custom, preferring to classify problems concerned with ontology in the cloak of epistemology. Nevertheless, his ontology becomes clearly defined in the section on metaphysics, by far the most ordered, informative section.

The *‘Uyūn* was also meant as a textbook on the philosophy of Ibn Sīnā. The style and contents of the *Hidāyah* closely follows that of the *‘Uyūn*. It is clear that al-Abharī was a student of the Avicennan tradition. The *Maqāṣid* of al-Ghazzālī was not intended for use in the *madrasah* system; it was a slightly revised version of Ibn Sīnā’s *Dānesh*

Nāma-i 'Alā'ī detailing the latter's views and opinions, without affording the reader an opinion of al-Ghazzālī's own doctrines. It has been suggested that certain problems discussed in the *Maqāṣid* are in fact al-Ghazzālī's own ideas and that these ideas are in direct contradiction to his philosophy as understood by his *Tahāfut*. These assumptions are however baseless. Nevertheless, his comprehension of the great masters was an indispensable benefit to his successors, for without the *Maqāṣid*, some of the more problematic ideas ascribed to Ibn Sīnā would probably have remained elusive to the student who would come to study him in the hopes defending and understanding his ideas.

Although we have not considered it for comparison, the *al-Ishārāt wa'l Tanbīhāt* of Ibn Sīnā deserves mention in this context. Its classification when compared to the three aforementioned formative works is similar. Indeed, the *Ishārāt* comprises the theoretical sciences, namely logic, physics, and metaphysics. In addition, the *Ishārāt* contains a treatise concerned with aspects of *taṣawwuf*, or sufism, a clear distinction in comparison to the other three compositions. His "explanation of the manner by which we acquire knowledge does not differ basically from the way a mystic acquires gnosis: both are gained by the soul seeking to join the Active Intellect, the source of all knowledge."¹⁶ On logic, the *Ishārāt* closely resembles the *Shifā'*, *Najāt*, and part one of the *Dānesh Nāma-i 'Alā'ī*. It is clear from the section on physics in the *Ishārāt* that it was never meant to be a textbook manual, rather it was intended for those on the path of philosophy able to decipher the books enigmatic nature.¹⁷

¹⁶ Parviz Morewedge, *The Metaphysics of Ibn Sīnā*, (London: Routledge and Kegan Paul, 1973), xvi. Morewedge uses the term "psyche" to mean "soul", a modern Freudian corruption which we are vehemently opposed to. Therefore we have taken the liberty to replace the offending term and employ the term "soul" in our quotation.

¹⁷ See Ibn Sīnā's *al-Ishārāt wa'l Tanbīhāt*, Sulaymān Dunyā ed. (Cairo: Dār al-Ma'ārif, 1958), II, 147, IV, 903-906.

Another of Ibn Sīnā's compositions bearing some similarities to the *Hidāyah* with regard to style was written in Persian.¹⁸ This work, the *Dānesh Nāma-i 'Alā'ī*, is more elaborate and was not intended as a textbook, it was rather a concise encyclopedic work to provide complete information concerning the *mashshā'ī* philosophical system, comprising "logic, metaphysics, natural philosophy and three other subjects, i.e., geometry, astronomy and music."¹⁹ We have mentioned that the section on logic closely resembles that of the *Ishārāt*, *Shifā'*, and *Najāt*. In general, most of his works on logic resemble one another both in terms of form and matter so there is little need to comment separately on each logical composition. The metaphysics of Ibn Sīnā is centered around the problem of being and its relation to the intellect. The Necessary Being as conceived by him is such that, by virtue of the axiom that only one may result from the One, a single being emanates from it necessarily. This single being is the First Intellect. By virtue of its definition of being caused necessarily, it is the source of multiplicity from which a descending hierarchy of being becomes the necessary cause for each subsequent emanation, terminating at the terrestrial level governed by the Tenth or Active Intellect. This terrestrial level is receptive of corruption and decay, whose reality of composite multiplicity cannot be perceived by the human mind without receiving intelligible forms from the Active Intellect. The reception of intelligible forms in the human intellect is due to the soul's ability to apprehend these forms by being connected with the Active Intellect. When the soul is connected with the Active Intellect, the resultant knowledge is intuition. Intuitive knowledge is thus constitutive of certitude.

The ascending hierarchy of being begins at the level of the human soul. Indeed for Ibn Sīnā and philosophers of the same tradition, the soul is immortal, immaterial and thus,

¹⁸ For an English translation see *Avicenna's Treatise on Logic (Part One of Danesh-Name Alai)*, trans. by Farhang Zabeeh, (The Hague: Martinus Nijhoff, 1971), for the metaphysics see *The Metaphysics of Avicenna* trans. by Parviz Morewedge, (London: Routledge and Kegan Paul, 1973).

¹⁹ Farhang Zabeeh, *Avicenna's Treatise on Logic (Part One of Danesh-Name Alai)*, 71.

incorruptible. Proof of its immateriality is by virtue of its ability to perceive intelligible forms, an ability dependant upon the faculties of the soul. Without the intuitive faculty, the soul is unable to perceive the reality of a thing and hence, a thing perceived by the senses remains abstract, devoid of meaning. A thing devoid of meaning cannot be defined and therefore, cannot be grasped by the intelligence; by virtue of its meaningless character it cannot be called knowledge. Yet the aim of knowledge with regard to the realities of things is to achieve certainty, and so by proving the immateriality of the soul, Ibn Sīnā establishes the ascending link between the terrestrial world, the Active Intellect and consequently its relation to the Necessary Being, whose reality is not defined as characteristic of being in the sense of all other beings, but whose existence is its very essence.

In our attempt at comparing the *Hidāyah* to other works of the same tradition in order to demonstrate and correctly represent the significance of the work in the Islamic philosophical tradition, we have made reference primarily to the various compositions of Ibn Sīnā. This apparent bias on our part is not entirely unjustified considering the abundant resources made available to us. More importantly, “Ibn Sīnā’s doctrines constitute the “floor” or the “fundament” upon which all discussion takes place.”²⁰ According to the late Professor Fazlur Rahman, “Ibn Sīnā was the philosopher who had constructed a full-fledged philosophical system, on an Aristotelian-neo-Platonic basis, with an inner cohesion that sought to satisfy both the philosophic and religious demands.”²¹ We tend to disagree with this statement, because it implies that the fundamental basis for Ibn Sīnā’s philosophical system is Aristotelian-neo-Platonic, then fundamental elements of the worldview of Islām are adopted in order to legitimize Aristotelian-neo-Platonic doctrines, which in turn would further imply that Ibn Sīnā held

²⁰ Fazlur Rahman, *The Philosophy of Mullā Ṣadrā*, (Albany: State University of New York Press, 1975), 10.

²¹ *Ibid.*

the tenets of philosophy above that of Islamic doctrine, whereas we know this not to be the case. Therefore, we would like to argue that Ibn Sīnā was the philosopher who had constructed a full-fledged philosophical system based primarily on the fundamental elements of the worldview of Islām, adopting certain Aristotelian-neo-Platonic doctrines that appeared to complement truths contained in those fundamental elements. This conclusion is attested from the terminology of Ibn Sīnā which bear the marks of Qur’anic origins, such as *ḥikmah*, instead of *falsafah*; *ilāhīyāt*, instead of *uthulujiya* or *al-falsafat al-ūlā*, and terms for specific terms in the sciences such as *māddah*, instead of *hayūlah*.

In addition, al-Abharī is traditionally known as a philosopher schooled in the Avicennan tradition; therefore it is only reasonable that a comparison of this kind include the works of Ibn Sīnā as a primary source. The purpose of such a comparison was simply to briefly summarize the contents of the *Hidāyah*, the *‘Uyūn* and the *Maqāṣid* without elaborating on the distinguishing characteristics of each text in terms of ideas. Having achieved our purpose in this regard an analysis of the ideas discussed in the *Hidāyah* becomes incumbent, hence, our subject matter is thus formed.

CHAPTER THREE

TEXTUAL ANALYSIS AND COMMENTARY: LOGIC

In general, the language of the Muslim sciences has predominantly been the Arabic language, although influences from other tongues has in some way undeniably enriched scientific terminology. However, the Arabic language has dominated technical terminology of both the theoretical sciences and theology. This is no more apparent than in the works of Ibn Sinā and his school of subsequent *mashshā'i* philosophers, and in the many compositions attributed to the *mutakallimūn*, al-Ghazzālī in particular. More importantly, it was by virtue of Islām that the systematization of the language to be applied to the sciences in general, became apparent. We have made mention of the fact that the genesis of Islamic sciences resulted from inquiry into the fundamental elements of the worldview projected by Revelation. Paramount to such an inquiry, as demonstrated by Professor al-Attas, must first involve the *islamization* of language.¹ Therefore it is reasonable to infer that the technical terminology adopted by the sciences must needs undergo the same transformation which we will refer to as the *islamization* of scientific technical terms, in order for that language to correctly convey the intended meanings of definition in conformity with the worldview of Islām. Failing this, whole ontological schemes with regard to both the theoretical and practical sciences result in the lack of cohesion and meaning in terms of certainty with regard to knowledge. In terms of knowledge, Islām does not deny the possibility of knowing the nature of things as they really are. Indeed certainty concerning objects of knowledge may be achieved through the various faculties of man, in addition to sound reasoning and judgement.² Yet, these faculties are limited by virtue of the very definition of man; consequently would this not

¹ See footnotes 14-16 of Chapter One.

² See Syed Muhammad Naguib al-Attas, *Prolegomena*, 14

then lead to the assumption that knowledge is limited and therefore so too certainty?

Professor al-Attas writes:

...reason demands that there is a limit of truth for every object of knowledge, beyond which or falling short of which the truth about the object as it and its potentials should be known becomes false. Knowledge of this limit of truth in every object of knowledge is either attained by way of common sense if the object is already something obvious to the understanding, or it is achieved through wisdom, either practical or theoretical as the case may be, when the object is something obscure to the understanding. ...*True* knowledge is then knowledge that recognizes the limit of truth in its every object.³

The recognition of these limits however is not an imperfection; on the contrary it is “both the arrival of meaning in the soul as well as the soul’s arrival at meaning,”⁴ and therefore, “the recognition of the proper places of things in the order of creation, such that it leads to the proper place of God in the order of being”⁵; knowledge of the proper places of things ultimately derives from religion but is manifest as wisdom (*hikmah*).⁶ In essence, knowing the limits is wisdom. Wisdom is the ultimate purpose of philosophy as understood by the Muslims; it means to know and to grasp the limits of truth and to know that that limit of truth is its reality.

Ibn Sīnā defines *hikmah* as a theoretical art beneficial to man’s soul whereby he is able to comprehend in accordance with his capacity that which concerns all beings, thereby enabling him, as an intelligible knower (*‘ālim*), to be elevated to a degree of perfection corresponding to the physical universe. This level is a preparation for ultimate happiness in the hereafter.⁷ It is clear from the definition that Ibn Sīnā is defining

³ Ibid., 14-15.

⁴ Ibid., 14.

⁵ Ibid., 16.

⁶ Ibid., 18.

⁷ Ibn Sīnā, “Aqsām al-‘Ulūm al-‘Aqliyyah”, *Tis’u Rasā’il*, (Miṣr: Matba‘ah Hindīyyah bi’l Musikī, 1908/1326), 104-105.

philosophy as understood by the Muslims. It is also evident that action dictated by *ḥikmah* is paramount in order that the intended goal, ultimate happiness in the hereafter, is achieved. It is also assumed that the action referred to corresponds to the tenets of the worldview as dictated by the fundamental elements derived from religion. Al-Ṭabarī for instance, defines the term *ḥikmah* according to the manner in which it was defined by his predecessors, namely that “*ḥikmah* is the Qur’ān and its (rational) understanding”.⁸ *Ḥikmah* is a term which ultimately derives from the Arabic *ḥukm*, which is defined by al-Jurjānī to mean “to put a thing in its right place and is said of that whose end is praiseworthy.”⁹ It is clear from his definition that to put a thing in its right place requires judgement on the part of the perceiver. The kind of judgement required is not haphazard nor is it capricious but a calculated assessment derived from wisdom (*ḥikmah*). Therefore, the fact that the term *ḥikmah* is derived from the term *ḥukm* is now clear. In his *Kitāb al-Ta’rīfāt*, al-Jurjānī defines wisdom according to the philosophers, *mufasssirūn*, and the linguists, or according to the way the Arabs understood the term. In the way the term is understood according to the linguists or the Arabs in general, it is defined as knowledge accompanied by the practice of that knowledge, or more precisely knowledge which is then translated into action.

This understanding of the term *ḥikmah* is taken from the Qur’ān. Indeed, one of the fundamental elements of the worldview of Islām involves the combination of both belief, based on knowledge, and action. There are at least fifty verses in the Qur’ān containing the combination of these two elements, *āmanū wa ‘amal al-ṣāliḥ*.¹⁰ This is one distinguishing element between the understanding of *ḥikmah* and that of *sophia*. *Ḥikmah* is not merely theoretical knowledge whose basis is derived from the fundamental

⁸ Al-Ṭabarī, *Jāmi’ al-Bayān fī Tafsīr al-Qur’ān* (Beirut: Dār al-Ma’rifah, 1980), 3. See also Alparslan Açıkgöç, *Scientific Thought and its Burdens*, (Istanbul: Fatih University Publications, 2000), 166.

⁹ Al-Sayyid al-Jurjānī, *Kitāb al-Ta’rīfāt*, (Beirut: Maktabah Lubnān, 1990), 97.

¹⁰ 2/Al-Baqarah, 25, 82, 277; 4/Al-Nisā’, 57. These are just a few examples.

elements of the Islamic worldview and whose certitude is assured, it also incorporates the element of action; hence, the wisdom acquired may be put into practice in accordance with the worldview. *Sophia* on the other hand does not include the element of action and therefore, theoretical knowledge remains theoretical. The Greek worldview, as we have already mentioned, relied on mythic legend and fantasy as its fundamental elements, therefore, philosophy, while on the one hand elevated man by virtue of the dictates of his reason, yet due to the shortcomings of the worldview these conceptual notions arrived at through reason could not be put into practice.

Let us now direct our attention to the *Hidāyat al-Hikmah*. We have already mentioned that the book is written in the *mashshā'ī* tradition, in particular in the Avicennan tradition. Before Ibn Sīnā, the term 'falsafah', merely a transliteration from the Greek word *philosophia* into Arabic, is used.¹¹ The term *hikmah* is used not merely as a substitute referring to philosophy, but as a correct interpretation of the theoretical sciences as understood by Muslim philosophers. This in itself is, in our opinion, a revolutionary departure from the understanding of philosophy as interpreted by the Greek philosophers. Modern writers of history generally refer to al-Kindī as being chiefly responsible for attempting to accommodate both the conceptions of philosophy and the doctrines of religion. This notion is no more evident than from the perspective of the etymological origin of the terms *falsafah* and *hikmah*. Why for instance was Ibn Sīnā's book the '*Uyūn al-Hikmah*' not entitled the '*Uyūn al-Falsafah*', when clearly it was a book on philosophy? This was surely because the understanding of philosophy was interpreted through the eyes of the worldview of Islām. The same can also be said of the *Hidāyah*, namely that the book was not entitled the *Hidāyat al-Falsafah* because the elements of

¹¹ We are not saying that the term *hikmah* did not exist, nor are we claiming that the term was not used as a title of a composition, for there are many such examples, for instance the *Siwān al-Hikmah* of al-Sijistānī. However the aforementioned work deals with a historical account of the Philosophers and not on philosophy *per se*, and therefore does not qualify. What we mean is that to our knowledge there were no philosophical compositions dealing strictly with philosophy as a theoretical science.

philosophy as understood by the Muslim philosopher were not identical to the Greek conception of philosophy; although in general the form of the theoretical science remained intact yet its matter was cloaked with elements that were clearly Islamic.

After our brief discussion concerning the title of al-Abhari's work under consideration here, we may begin an analysis and commentary on each section of the book. In this chapter we are concerned with logic. Our analysis will try to present three topics which may be derived from the logical section of the *Hidāyah*: The logical theory, mental perceptions and judgements.

A. THE LOGICAL THEORY

The arrangement of the *Hidāyah* follows a certain method. Like Ibn Sīnā before him, al-Abhari was of the opinion that the science of logic is to be considered the most pure owing to the fact that it is the most formal. He does offer his opinion with regard to a philosophy of logic however one may assume that he is of the same opinion as Ibn Sīnā with regard to the definition of knowledge and the kinds of knowledge to be inquired into.¹² Al-Abhari's theory of logic considered in itself it is a science but when it is applied to the study of philosophy it is a tool employed by the theoretical sciences in order that correct conclusions may be reached based on sound proofs and supported by valid arguments which conform to the rules of logic. And so just as our knowledge of things begins with the simplest elements which are understood by means of simple concepts, logic begins with conceptions (*taṣawwur*). These conceptions are based primarily on perception. They are then given intelligible meaning when the intellect derives meaning from what is perceived. In order to do so it has to make judgements; these are acquired through assent (*taṣdīq*). By virtue of assent the mind is able to understand what it

¹² See Chapter Two on the Significance of The *Hidāyat al-Hikmah* in Islamic Philosophical Literature.

perceives. Some judgements are made intuitively without the medium of the external senses.

Al-Abharī's *Hidāyah* with regard to the section on logic begins with the intention of the logician which is to study conventional verbal denotation, briefly citing their different kinds accompanied by examples. This is followed by a brief summary of concepts and their divisions, citing examples for each. His discussion on universals is brief and concise in summarily defining all their major constituent parts. Al-Abharī offers an abbreviated discussion concerning the doctrine of definition as a prelude to the topic on propositions, on contradiction, and on conversion. Again, it is not an exhaustive presentation, nor is it a meticulously detailed exposition. His aim is only to introduce the reader to the major parts supported by clear examples. Al-Abharī does not discuss the pendants of syllogism. Instead, he outlines the kinds of syllogism, identifies the terms of the premises, and names the four figures of syllogism. Only the conclusive moods of the first three figures are mentioned supported by their respective examples. With regard to the matter of syllogism, only demonstration is considered the most important and hence is afforded a somewhat longer explanation in comparison with the other four. Al-Abharī's treatment of logic is very unsystematic, two chapters are clearly enumerated; the rest fall into the category of guides (*hidāyah*). Clearly, the Muslims augmented the scope of an introduction to logic to include not only the five universals, but also the eight books of Aristotelian logic.¹³ This was then considered to be an introduction to logic, collectively known as *al-madkhal*.

One important feature present in Islamic logic as opposed to the Aristotelian logic is that in the case of the former, logic was no longer conceived merely as an *organon*. In

¹³ The eight books referred to are, *Categoriae*, *De Interpretatione*, *Analytica Priora*, *Analytica Posteriora*, *Topica*, *Sophistici Elenchi*, *Rhetorica*, and *Poetica*

fact, beginning with al-Farābī and Ibn Sīnā, logic was at once conceived both as an *organon* to be applied in various theoretical sciences and as an independent philosophical science.¹⁴ It is for this reason, that al-Abharī presents formal logic as an integral part of the philosophy of logic. This feature is not evident from his approach at the outset of we are assuming that he concurs with Ibn Sīnā with regard to the definition of knowledge (*‘ilm*) and its classification from the perspective of formal logic. In this respect Table 1 gives us a clue as to why logic begins with definition of knowledge.

¹⁴ See Nicholas Rescher, *Studies in Arabic Logic*, (Pittsburgh: University of Pittsburgh Press, 1963), 16.

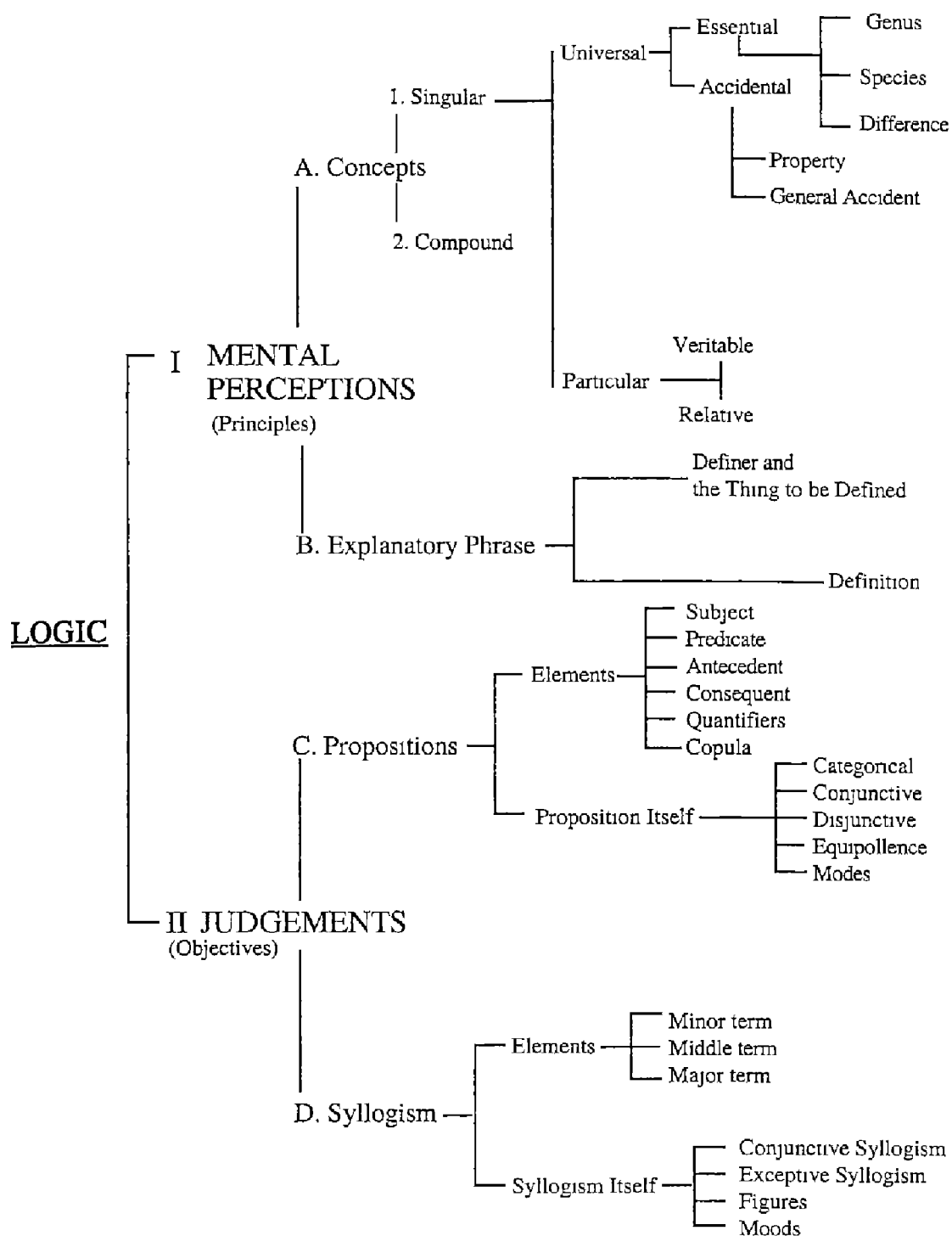


Table 1 An Epistemological Progression of Logic with respect to its Subject Matter

B. MENTAL PERCEPTIONS (*TAŞAWWURĀT*)

We may propose that al-Abharī conceives logic also as a science which analyzes the elements of knowledge. In this sense of course he is following the Avicennan tradition which holds that from logic derives the foundation of epistemology. This approach assumes that in analyzing the elements of knowledge we acquire the basic means to knowledge. This basic means to knowledge therefore, constitutes the first major division of logic called "*taşawwurāt*". The principles by which the acquisition of knowledge of the fundamental elements are still required. By virtue of this we then embark upon combining these elements meaningfully, logically, in other words consistently and systematically in order to expand the scope of our knowledge. This constitutes the second division of logic called "*taşdiqāt*". That is why according to al-Abharī knowledge is divided into two kinds:

1. Conceptions or mental perceptions (*taşawwurāt*), which is the kind of knowledge that does not adjudicate; it merely apprehends the image of existent forms in the mind. It is this apprehended image that we call 'concept'. Some conceptions are grasped intuitively (*badihī*), or *a priori*, while others are deduced or theoretical (*naẓarī*). Using logical reasoning as a tool, deductive concepts may be derived from, or founded upon intuitive, or *a priori*, concepts.
2. Judgements (*taşdiqāt*)¹⁵, which is the kind of knowledge that utilizes the apprehended images (concepts) and makes an assertion that something is true. This assertion is an affirmation of the correspondence between the concept and the thing represented by it. Like conceptions, some declarations are grasped intuitively (*badihī*), or *a priori*, while others are deduced or theoretical (*naẓarī*). Similarly,

¹⁵ Judgement (*taşdiq*), or Assent, or Declaration is the verbal noun derived from *şādiq* which means to be true, and therefore *taşdiq* is an assertion that something is true. Often it is used for phrases that are known to be true, for example: "The world is temporal".

using logical reasoning as a tool, deductive concepts may be derived from intuitive, or *a priori*, concepts.

It is apparent then, that conception precedes declaration given that every declaration must first contain the conception or the assertion of the subject, following which a judgment that the relation between subject and predicate is or is not taking place; however, according to Ibn Sīnā, while every declaration presupposes conception, the converse is not true. The subjects of a science are those that have been appointed or that have been designated, and which are inquired into either essentially, or partially. The logician inquires into these two kinds of knowledge (i.e. *taṣawwur* and *taṣdiq*) so far as it leads to the unknown contained within them, and so far as it leads to other conceptions and declarations. The conceptions which lead to other conceptions, are the five universals; that is to say genus, species, general accident, differentia, and property.

As we have shown, al-Abharī takes concepts to be the most simple and fundamental elements of our knowledge. Just as “words” are the most primary elements of our language, because thought and language are reflexive, in the same way, our thought has concepts as its simple elements. Having thus classified and explained each class of concepts, al-Abharī goes on to discuss how concepts have “contents”, in other words meanings. This is achieved by way of denotation (*al-dalālah*), which, according to al-Abharī, refers to something’s being in such a way that its knowledge requires the knowledge or conjecture of something else; or, the conjecture of which requires the conjecture of that thing. It becomes clear from this definition that the way to know what something is, is through a phrase defining or explaining what that something is. The explanatory phrase is a denotative means used to arrive at unknown conceptions from known conceptions. It is also called the definer or *definiens* (*al-mu’arrif*) because it points

to its true nature. Proof is also a denotative means used to arrive at unknown declarations from known declarations.

There are four kinds of proof; demonstrative, persuasive argument, non-verbal, and verbal. Each one of the four kinds of proof is divided into three possible combinations with regard to their acquisition, namely conventional (*waḍa'īyyah*), natural (*tabī'īyyah*), and rational (*'aqliyyah*).

1. Demonstrative proof is that which leads to certainty.
2. Persuasive argument is the kind of proof that leads to conjecture.
3. Non-verbal proof is that which does not lead to implication.
4. Verbal proof is the kind of proof that leads to implication.

Conventional verbal denotation is what the logician is concerned with. In reference to the three possible combinations¹⁶ mentioned by al-Abharī correspondence does not preempt implication or entailment, for, by definition, since correspondence (*al-muṭābaqah*) denotes complete meaning it is analogous to the concept 'universal' which generally contains particulars. Since implication (*al-taḍammun*) denotes part of a meaning, it does not preempt entailment; it exists only with correspondence. With regard to entailment (*al-iltizām*), it is necessary that the external thing be in such a condition that the conceptualization of a name must follow, else the meaning cannot be understood by the term. It is not necessary that the external thing be in such a condition that its actual existence be connected with the actual existence of the thing named. For instance, the

¹⁶ i.e. by correspondence, by implication and by entailment.

word 'blind' is the indication of sight, yet these two things are not connected in their actual existence.¹⁷

1. Single and Compound Expressions (Terms)

We may conclude from the *Hidāyah* that individual concepts are either singular or compound terms (expressions). A singular expression is one that may or may not have a part to it, but that part cannot have denotation (i.e. the part of a singular expression is a part that cannot denote anything). Al-Abhari emulates preceding logicians in that he classifies a singular term as corresponding to a universal (*kulliyy*) or a particular (*juz'iyy*). A universal is that whose quiddity is included in its meaning.¹⁸ The essences of universals can only be established if a certain essential quality is present otherwise the basic nature of the universal contained within its particulars which are its foundation cannot be known.¹⁹ This essential quality may be derived from either the genus, species, its differentia, or as an accident.

Logicians define the genus as a universal which has a common reality between the species of its genus, and all other species classified under that genus. A genus is said to be proximate (*al-jins al-qarib*) if its quiddity encompasses all the species described by that quiddity in a valid, immediate answer to the question, "what is it?".²⁰ A genus is said to be remote (*al-jins al-ba'id*) if its quiddity includes only some species described by the

¹⁷ See A. Sprenger, "First Appendix to the Dictionary of the Technical Terms Used in the Sciences of the Mussalmans, Containing the Logic of the Arabians in the Original Arabic, with an English Translation". Calcutta: F. Carberry, Bengal Military Orphan Press, 1854, Asiatic Society of Bengal, Biblioteca Indica no. 88, 5. Although in reality, the connection between the two are opposites; the mind logically connects the two in order to define one in relation to the other.

¹⁸ For instance the term 'human'. When we say 'human', the term pre-supposes that he is a 'rational animal' by definition.

¹⁹ For instance 'animal' is an essential quality in relation to 'human' and 'horse'. Without knowing the quality 'animal' it would not be possible to show the relation between 'human' to the 'horse'.

²⁰ For example 'animal' in relation to 'human' and 'horse'. The 'human' and 'horse' in general share the nature of animality, and are therefore, subordinates of the genus 'animalia'. Another example is 'reproductive ability' with respect to 'humans' and 'plants'.

quiddity in answer to the question, "what is it?".²¹ There are several degrees of remoteness depending upon the immediateness of the answer to the question "what is it?", with regard to the quiddity of the thing specified. One may illustrate the degrees of remoteness in the following manner.

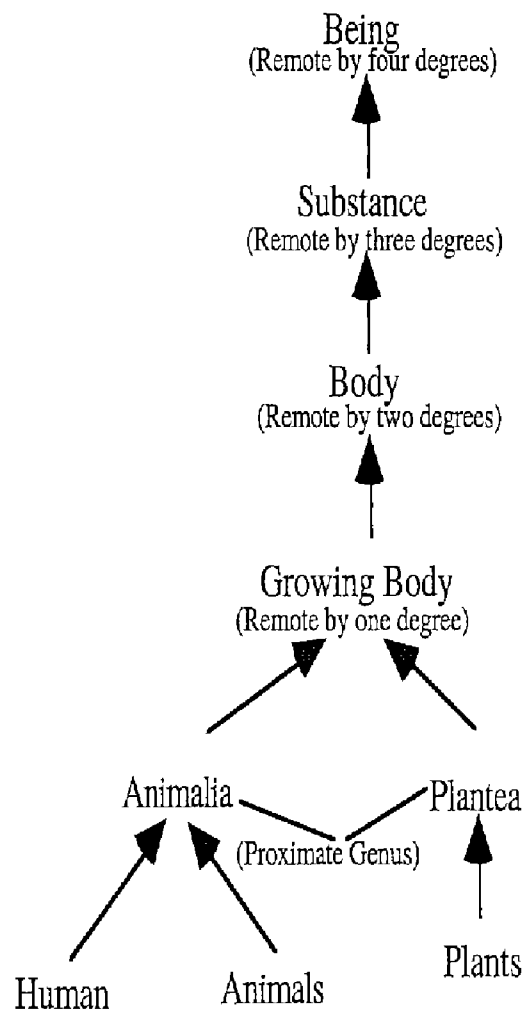


Table 2

²¹ The example cited is that of a 'growing body with respect to 'humans' and 'plants', and not with respect to 'humans' and 'horses'. This is because a 'growing body' with respect to 'humans' and 'horses' would be a valid answer for a proximate genus since the variables share in animality. Conversely, this is not the case with respect to 'humans' and 'plants', since only some of the characteristics are common between these variable, 'growing body' being one of those common characteristics.

Al-Abhari confirms that the genus of genera occupies the apex of a hierarchical order under which all other genus' are classified.

Genus and difference are both necessary elements with respect to species. Species then, is a necessary element for a specific quiddity of a species that makes a distinction between the realities of that species.²² It is also said in answer to the question, "what is it?" for it shares the capacity to manifest individual traits held in common with other members of the same species. Once again, al-Abhari confirms that species is arranged according to a hierarchical order where 'species of species' would be subordinate to all other individuals of the species.

Ibn Sīnā, defines difference as a universal said of a thing in reply to the question, "what thing of its genus is this in its substance."²³ In short, it is the distinguishing factor for species of the same genus. A differentia is said to be proximate (*al-faṣl al-qarīb*) if a distinction is made between individual species of the same genus.²⁴ Similarly, a differentia is said to be remote (*al-faṣl al-ba'īd*) if a distinction is made between individual species of a different genus.²⁵

An accident (*'araḍ*) is a quality belonging to things which may or may not be attributed to the basic nature of things without actually being a component of their essences. Ibn Sīnā classified a universal as being either essential, concomitant accidental, or separable accidental. He defined the concomitant accidental as being a quality belonging to things inseparable from their essence, for instance, 'laughter' in relation to

²² For example, 'human' in relation to 'Zayd' and 'Umar'. Being 'human' is common to both, the distinction however, lies with the realities 'Zayd' and 'Umar'.

²³ See Ibn Sīnā's *Kitāb al-Shifā'*, Qanawāti et al. Ed., (Cairo, Revised ed.1983), v. 1, 76.

²⁴ For example 'rational' is the distinguishing factor for 'man' with respect to 'animals' classified under the genus 'animalia'. In other words, the constituents factors for man, (i.e. 'rational' and 'animal'), are differentiated by virtue of a universal which is common to 'man' yet alien to 'animal'.

²⁵ For example, 'man', and 'plant' are differentiated with regard to a 'growing body'. Al-Sī'irdī, illustrates this in the following example. "'Sensual pleasure' is distinct for 'man' with regard to other participants of a 'growing body'." See *Kutāb Isāghūjī fi'l Mantiq*, edited by Sadreddin Yuksel, 7. Translation my own.

'man'. Furthermore, he defined separable accident as being a quality applied to a thing which is separate from its essence, for instance, 'black hair' in relation to 'man'. Al-Abhari's approach is a little different. The essential described by Ibn Sīnā corresponds to property (*al-'araḍ al-khaṣṣah*), whereas both the concomitant accidental, and the separable accidental characterized by Ibn Sīnā is referred to simply as 'general accident'. As far as property is concerned, the ancients, as described by Porphyry, used the term 'property' in four distinguishing senses. It is either that which occurs exclusively in one species, yet not inclusive of all the individuals of that species, or that which occurs inclusive of all individuals in a species, or that which occurs to a select number of individuals in a species, or that which occurs inclusive of all individuals of that species, yet temporally.²⁶ Ibn Sīnā rejected the first sense, consequently concentrating on the remaining three paying particular attention to the second sense outlined by Aristotle and Porphyry.²⁷ Al-Si'irdī notes that, "if an accident is peculiar to the same verity, for example, 'laughter' in potentiality and in actuality with respect to 'humans', then it is called 'property'".²⁸ "If an accident generalizes realities from more than one species, for example 'one who breathes' in potentiality and in actuality, then it is called 'general accident'".²⁹ Porphyry says of an accident that it is an essence, existent in that which may or may not be shared by the same verity, and is therefore, not a genus, species, property, or difference.³⁰

If the realities contained in one universal simultaneously and completely correspond to realities contained in another, both universals are said to be coextensive; this is also true of their contraries, namely that the incompatible realities in one must

²⁶ See *Isagogue*, Porphyry the Phoenician, 48.

²⁷ See Shams C. Inati, *Ibn Sīnā Remarks and Admonitions, Part One: Logic*, (Toronto: Pontifical Institute of Medieval Studies, 1984), 18.

²⁸ See *Kitāb Īsāghūjī fī'l Mantiq*, 7. Translation my own.

²⁹ Ibid, 8.

³⁰ See *Isagogue*, Porphyry the Phoenician, 49.

correspond completely with the incompatible realities in the other. In other words one must be analogous to the other; for example, 'rational' must be analogous with 'man'. If one of them is inclusive of the other but not vice versa, we can say that there is absolute generality and peculiarity between them. If the realities contained in one universal is wholly dissimilar to the realities contained in another, both are said to be heterogeneous; for example, 'man' and 'horse'. This may be illustrated as follows:

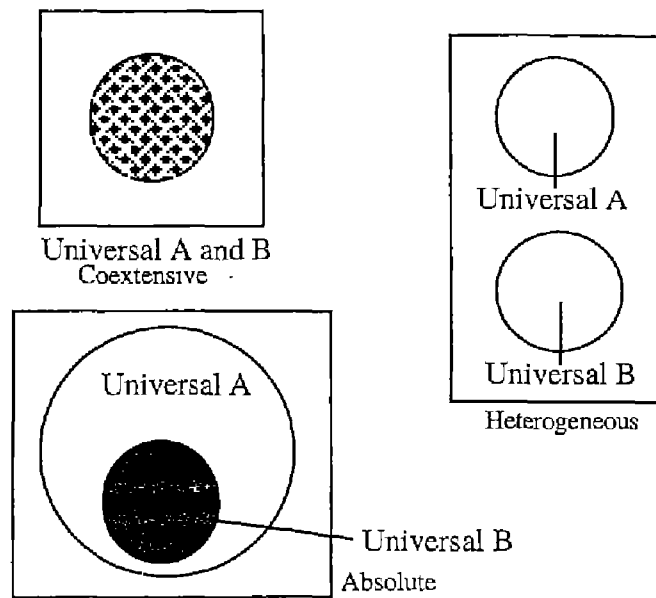


Table 3

2. The Explanatory Phrase (*al-Qawl al-Shāriḥ*)

Knowledge concerning the rudiments of the explanatory phrase equips the reader with an understanding of how to proceed. There are two kinds of explanatory phrase; definition and description. Al-Abharī does not explicitly mention the explanatory phrase; knowledge of it has to be derived from the discussion concerning the *definiens* (*al-mu'arrif*). Once again, this obvious omission on the part of the author simply indicates

that al-Abharī possessed such a mastery of the subject that he did not bother to address every single element discussed in logic. We arrive at this conclusion simply by admiring his competence as evidenced by the *Īsāghūjī*. It is also possible that the entire section on logic constituted his lecture notes, and so he would read from his notes only to remind himself to discuss a particular topic and then the rest was left up to discussion in his classes. More importantly, we may conclude that the section on logic contained in the *Hidāyah* was deliberately removed, partly due to its unsystematic nature and partly due to the fact that the *Īsāghūjī*, which is a more mature composition, already addressess the omitted topics. This proves then that the *Īsāghūjī* is a later composition.

It is not permissible to define a thing by its quiddity because it would assume that the definition would be known prior to the thing defined, which would mean that the thing defined would be known before itself. A thing must not be defined by something more general than the thing to be defined, or its definition would fall short of the truth. Similarly, a thing must not be defined by something more peculiar than the thing to be defined, or it will remain obscure.³¹ The explanatory phrase is an expression leading to definition. Al-Abharī explains that there are two kinds of definition, and two kinds of description. Definition (*ḥadd*) is a construction in which the genus is indicated along with its difference. In order to capture the essence of the thing defined with respect to all other things, the definition has to indicate all the differences pertaining to it. Complete definition (*ḥadd tāmm*) is a definition that incorporates the proximate genus and the proximate difference of the thing to be defined.³² Incomplete definition (*ḥadd nāqis*) is a

³¹ I have extracted a general summation of the ways of defining from A. Sprenger's translation of the *Risālah Shamsiyyah fī 'Ilm al-Mantiq* by Mawlāna Najm al-Dīn Kātibi Qazwinī, contained in the "First Appendix to the Dictionary of the Technical Terms Used in the Sciences of the Mussalmans. Containing the Logic of the Arabians in the Original Arabic, with an English Translation". It should be further noted that care should be observed not to define a thing that is coextensive with the thing defined, for example, defining 'motion' as being 'not at rest'; or, defining 'even' as being 'not odd'.

³² For example, 'animal' and 'rational' with regard to 'man'. By incorporating both the proximate genus, 'animal', and the proximate difference, 'rational' a complete definition of 'man' as 'rational animal' is achieved.

definition that incorporates the proximate difference and the remote genus of the thing to be defined.³³ Table two illustrates that the genus 'being' is remote with respect to 'mans' by four degrees, hence, incomplete definition is so called because there remains an element to the definition of man that can be further defined.

Description is also a construction in which the genus is indicated, however, contrary to definition, a description includes property which is part of the essence and is true for all realities contained within the species. A complete description (*rasm tāmm*), literally taken to mean a representation or illustration, is a description that incorporates property and the proximate genus. It is unclear from the text whether all properties must be included as being essential to description, for al-Abhari's example is only with regard to 'man'. We are therefore assuming that his brief illustration will suffice. In an incomplete description (*rasm nāqis*), the proximate genus is excluded, and it may include property alone,³⁴ property and remote genus,³⁵ property, remote genus and general accident,³⁶ and property and difference. Al-Abhari does not point out the difficulty in differentiating between the essential parts and accidental things in quiddities, for clearly, the accident cannot be expressed in definition. Ibn Sīnā makes the distinction between definition and description in the real sense, and that which is not a definition and a description in the real sense. According to him, a phrase used to extrapolate the essence of an existent quiddity by the generalities of its differences with regard to its essence, is a definition though not in the real sense because the definition is not indicative of all its differences.³⁷ Similarly, a description adopting only some properties of the thing to be

³³ For example, 'rational' and 'being' with regard to 'man'. By incorporating the proximate difference, 'rational', and the remote genus, 'being', an incomplete definition of 'man' as 'rational being' is achieved.

³⁴ For example, 'writing' in reference to 'man'.

³⁵ For example, 'writing body' in reference to 'man'.

³⁶ For example, 'writing black haired body' in reference to 'man'.

³⁷ An analysis and summary of Ibn Sīnā's discussion on definition and description is to be found in *Ibn Sīnā Remarks and Admonitions*, 19-21, 70-71.

described cannot be a description in the real sense unless it is inclusive of all properties comprised in it.³⁸

C. JUDGEMENTS (*TAṢDĪQĀT*)

It is clear from al-Abhari's logical theory that the actual step towards acquiring the knowledge of realities is taken when concepts, as discussed in the first division of logic, are combined meaningfully. This combination, linguistically called "sentence", is "judgement" in the logical sense. Judgements are commonly termed "propositions" (*qaḍāyā*, *qaḍiyyah* sg.) by Muslim logicians. The task of the logician is to lay down the rules for propositions, so that he who inquires into the sciences will enable himself to properly construct such combinations. But the goal of logic is also to show how one may infer conclusions based on such judgements. It is thus the purpose of the logician to lay down the rules of such more complex combinations. The higher forms of combined judgements are called "syllogism" (*qiyās*).

In this way the *Hidāyah* presents two general topics for the logician under the heading of judgement: propositions and syllogism. We shall now present how al-Abhari deals with these complex forms of logical inquiry.

1. Propositions

It is common practice among Muslim logicians to discuss propositions and their rules as a prelude to the discussion on syllogism, which is a form of mediate inference constructed of propositions which, necessarily leads to a conclusion. A proposition is a composition which affords an assertion for which the listener is able to decide between whether is true or false, from the speech of the one who utters it. The three main forms; categorical, conjunctive, and disjunctive propositions are indicated in the text. With regard to the

³⁸ Ibid

latter two, they are conditional propositions and are composed of two (in the case of conjunctive propositions) or more (in the case of disjunctive propositions) conjoined predicative propositional assertions wholly different from one another. They are made conditional by the addition of a connective conditional, for example, if A then B, and either A or B, whereby the consequent follows necessarily from the antecedent as is the case in the former, or not necessarily, as is the case with the latter. With reference to conjunctive propositions, without the connective conditional they would be two independent assertions by themselves.³⁹ Similarly, with reference to disjunctive propositions, without the connective conditional, the phrase would be more than one proposition.⁴⁰ We are here summarizing the three main forms of propositions and their subdivisions.

Categorical propositions are propositions where subject and predicate are connected by 'is' or 'be'. For example A is B, where B is predicated of A. They are also known as attributive propositions because it is a judgment where the predicate is attributed to the subject. They may be in the affirmative or in the negative, specified, or quantified. A further subdivision of quantificational propositions is that it may be a universal, existential⁴¹, or ambiguous. Ambiguous propositions are universal propositions without an indication of a quantifier. A proposition is said to be ambiguous because its meaning may be understood in two ways; either it refers to a universal, or it refers to a particular. If a quantitative element is not indicated, universality cannot be assumed, or the nature of 'man' would be understood in the general sense. This being the case, the nature of 'man' would be excluded from the individual sense, meaning 'man' cannot be considered as such. Therefore, since ambiguous propositions may be relevant universally,

³⁹ Ibid, 78.

⁴⁰ Ibid.

⁴¹ We are using the modern formal logic technical term here in place of 'quantificational particular'.

they may be relevant particularly.⁴² Hence, an ambiguous proposition is potentially a particular proposition.

Conjunctive propositions are conditional propositions composed of categorical (predicative) propositions, and cannot be directly reduced to simple parts. We note in the text that al-Abhari addresses the different kinds of conjunctive propositions. However, in his haste, he does not mention that the same aforementioned subdivisions also apply. An incompatible disjunctive proposition is that whereby the term 'or' indicates that the conceptions referred to are incompatible (i.e. cannot exist together in the same subject), and therefore, excludes one of the predicates. It would be erroneous to say, 'this thing is a stone and a tree'. In contrast, the totally exhaustive proposition is a disjunctive whereby the term 'or' indicates that both the subject and predicate of the proposition may exist together, and does not exclude either of the predicates. Analysis of the example given by al-Abhari, "Zayd is at sea or he will not be drowned" reveals that a part of the proposition is actually the part not excluded from a veritable proposition. That is to say, Zayd is either at sea or he is not at sea. It follows, by coincidental conjunctive, that, if he is not at sea then he will not be drowned.

Although al-Abhari does not discuss modal propositions, it is worth mentioning that they are categorical propositions where a modal quality (i.e. duration, necessity, temporality) is indicative of the link between predicate and subject. In addition, it is pertinent to mention that ibn Sinā applied a qualitative element to both conjunctive and disjunctive propositions equally. Such a departure from Aristotelian logic is an original distinction in Muslim logic. With reference to this Rescher affirms;

....so far as I have been able to determine, Avicenna is
the first writer in the history of logic to give an

⁴² We have summarized the explanation on ambiguous propositions from *Ibn Sinā Remarks and Admonitions*, 81-82.

analysis of hypothetical⁴³ and disjunctive propositions that is fully articulated with respect to quality and quantity.⁴⁴

The link of the predicate to the subject must be qualified by a word expressing that qualification. That qualification is the matter⁴⁵, the word expressing it is the mode. In order to understand the concepts 'by necessity', and 'by possibility' with regard to absolute, necessary, and possible propositions, one has to refer to Ibn Sīnā's comprehensive explanation on the matter of propositions, considering it a propaedeutic. According to Ibn Sīnā, a predicate, consequent of a predicative, and a conditional proposition respectively, must show in what state the proposition is. These are referred to as modal states, and are either necessary⁴⁶, possible, or impossible.⁴⁷

The relation of predicate to subject, or of consequent to antecedent, whose existence in reality is necessary requires that the predicate, or consequent be inseparable from the subject, or antecedent, as long as the essence of the subject and the antecedent remains true. The converse is also true with regard to impossibility, whereby the relation of predicate to subject or of consequent to antecedent is that whose non-existence in reality is necessary, as long as the essence of the subject and the antecedent remains true. In other words their existence in reality requires that the predicate, or consequent be separable from the relation of predicate to subject, or of consequent to antecedent.⁴⁸ Ibn Sīnā divides necessity into at least two main categories: necessity in existence,

⁴³ We have translated hypothetical propositions as conjunctive propositions.

⁴⁴ See *Studies in the History of Arabic Logic*, 83.

⁴⁵ We have referred to Ibn Sīnā's work on the matters and modes of propositions to be found in *Ibn Sīnā Remarks and Admonitions*, 90. Also please see footnote number one of the same reference.

⁴⁶ There is a distinction to be made here between the logical technical terms *wājibah*, and *darūriyyah*. The former refers to that which is inherent in the definition, in existence as, 'man is a rational animal', and is not to be confused with the metaphysical term *Wājib* which refers to the sacred, as, *Wājib al-Wujūd*, translated as Necessary Existence. The latter refers to that which is inherent in the definition, either in existence or in non-existence, as, 'man is a writer'.

⁴⁷ See *Ibn Sīnā Remarks and Admonitions*, 90-91.

⁴⁸ *Ibid.*

corresponding to what we have explained with regard to necessity, and absolute necessity which requires that the relation of predicate to subject, or of consequent to antecedent be inseparable from the subject, the antecedent free from condition and therefore non-modal, in other words the essence of the subject and the antecedent exists permanently. We may infer therefore, that absolutely necessary propositions, are independent of possibility. Ibn Sīnā points out that the first type is conditioned by several factors: the existence of the subject's essence, the duration of the quality qualifying the subject, non-determined time, determined time, and duration of the predicate.⁴⁹ Necessity in general is relevant to those realities whose existence in reality is not impossible. Therefore, possibility is more general than necessity, as we have defined it. For instance, 'running' with respect to a 'man' endures without necessity, for it is associated with man as an accident. However, when one is actually running, there is a necessary link of predicate to subject as long as 'running' endures. Possibility in this sense, is the negation of impossibility as well as the negation of necessity of existence; in other words, possibility is predicated of the subject being conditioned of a certain enduring quality.

Returning now to the discussion of modality, it is a quality that refers to the state of the proposition. If, for instance, we were to say, "necessarily, every human is a rational animal" we are making a qualification that everything included in the meaning of 'man' is always by necessity, a 'rational animal' as long as the essence 'man' exists.

There are fifteen modal propositions⁵⁰, eight of which are termed simple, while the remaining seven are termed compound. Simple modal propositions are those whose truths are simply affirmed or denied⁵¹ of the subject by the predicate. Compound modal

⁴⁹ Ibid, 25.

⁵⁰ The *Risālah Shamsiyyah fī 'Ilm al-Mantiq* by Mawlāna Najm al-Dīn al-Kātibī al-Qazwīnī lists thirteen modal propositions. See *The Logic of the Arabians*.

⁵¹ Ibid, 19.

propositions are those whose truths are “composed at the same time of an affirmation and a negation”⁵² of the subject by the predicate. In order not to fall into the abyss of prolixity we do not intend to enumerate all fifteen modal propositions. Our aim is only to explain the more salient features of logic that have not been explained by al-Abharī in the *Hidāyah*.

Equipollent propositions are dispensed with in the text. However, we are mindful of the different kinds of equipollent propositions. There are three variations:⁵³

- 1) Where the subject is composed of an expression and a negative particle, for example, ‘non-A is B’. The part composed of the expression, ‘A’, joined to the negative particle, ‘non’, is the subject. If the copula is in the affirmative, as it is in the example, the whole proposition is said to be an affirmation. The converse is also true.
- 2) Where the predicate is composed of an expression and a negative particle, for example, ‘A is non-B’. The part composed of the expression, ‘B’, joined to the negative particle, ‘non’, is the predicate. Similarly, if the copula is in the affirmative, as it is in the example, the whole proposition is said to be an affirmation. The converse is also true.
- 3) Where both the subject and the predicate are composed of an expression and a negative particle, for example, ‘non-A is non-B’. The parts composed of the expression, ‘A’, and ‘B’, joined to the negative particle, ‘non’, are the subject and the predicate respectively. Likewise, if the copula is in the affirmative, as it is in the example, the whole proposition is said to be an affirmation. The converse is also true.

Contradiction, with regard to two propositions, is where one is true while the other is false. However, there are certain conditions which must be fulfilled before a contradiction can be instituted.

- 1) The parts of both propositions must coincide in meaning. For instance, one were to say, ‘Zayd runs’, and ‘Zayd does not run’. If ‘runs’ in the former is meant ‘in potentiality’, and in the latter is meant ‘in actuality’, then these two propositions are not contradictory because the meaning of the parts in both do not coincide. However, if we were to mean ‘runs in actuality’ with regard to both propositions, they are then said to be contradictory.⁵⁴

⁵² Ibid.

⁵³ See *Ibn Sīnā Remarks and Admonitions*, 85. See also 83, footnote 23.

⁵⁴ See *Kitāb Īsāghūjī fī’l Mantiq*.

- 2) The previously cited example assumes also that one of the propositions must be in the affirmative (or an affirmation), while the other must be in the negative (or a negation).⁵⁵
- 3) If the propositions are quantified, one must be a universal, while the other must be a particular.⁵⁶

A conversion is an inference where the predicate or that which resembles it⁵⁷ is replaced by the subject or by that which resembles it⁵⁸ and vice versa, with the stipulation that there be no modification as to the quality and truth value. This inference is also known as a conversion. In this respect attention must be directed to four possible combinations:

- 1) If the proposition is a universal affirmative, its converse cannot be other than a particular affirmative. For example:

All human beings are animals.
Some animals are human beings.

- 2) If the proposition is a particular affirmative, its converse remains the same. For example:

Some human beings are animals.
Some animals are human beings.

- 3) If the proposition is a universal negative, its converse remains the same. For example:

No human beings are stones.
No stones are human beings.

⁵⁵ Ibid.,

⁵⁶ Ibid., 9.

⁵⁷ i.e. the consequent of a conditional proposition.

⁵⁸ i.e. the antecedent of a conditional proposition.

4) If the proposition is a particular negative, its converse is not always true and not always false. For example:

Some animals are not human beings.
Some human beings are not animals.

and;

Some stones are not human beings.
Some human beings are not stones.

The rules of conversion for contradictory propositions are generally accepted to be such that the complement of the predicate or that which resembles it, and also the quality of the proposition should be changed. For example:

Every human being is an animal.
No non-animal is a human being.

The aforementioned examples cannot be considered syllogism, as we shall explain below.

2. Syllogism

Syllogism is considered the most reliable form of proof. It is a form of mediate inference constructed of propositions which necessarily leads to a conclusion. In other words, it is an inference from at least two propositions that necessarily leads to a conclusion. The prerequisite propositions are known as premises. The conclusion, which is a new proposition arrived at by necessity, cannot be identical with one of its premises, for one cannot prove a proposition with another proposition identical to it.

Syllogism has two aspects form, and matter. Although al-Abhari does not define these concepts, it is already understood in the Aristotelian context that the form of a syllogism deals primarily with its composition (*hay'ah*), that is to say, the kinds of

propositions, with respect to form again, that constitute its premises in accordance with the rules of syllogism, their moods and figures, and the manner in which conclusions are derived from the given premises. On the other hand, the matter of syllogism is either a certainty or a non-certainty, and is concerned with the kinds of propositions that are, *inter alia*, self-evident, based on intuition, accompanied by demonstration, and so on.

a. The Form of Syllogism

Our discussion on syllogism must begin with its form. As a precursor we will briefly outline the pendants of syllogism. These are those that have the same form as syllogism but do not have the same conclusions and are deductive. There are four kinds:

1) Polysyllogism, or compound syllogism (*al-qiyās al-murakkab*). There are two possible types:

a) Connected conclusion (*mawṣūl al-natā'ij*). This kind of syllogism is where the conclusion is stated explicitly. It is so called because the conclusion from the first set of premises clearly becomes the premise for the second syllogism whose conclusion is in turn the premise for the third syllogism, and so on. For example, if the desired objective was to conclude that 'Every C is E', one would employ the following method from the given premises.⁵⁹

Every C is B. (p1)
Every B is D. (p2)
∴ Every C is D. (c)

Every C is D. (p1)
Every D is A. (p2)
∴ Every C is A. (c)

Every C is A. (p1)
Every A is E. (p2)

⁵⁹ Example taken from *The Logic of the Arabians*, 32.

∴ Every C is E. (c)

- b) Separate conclusion (*maḥṣūl al-natā'ij*). This kind of syllogism is where the conclusion is not stated explicitly. It is so called because the conclusion does not follow immediately after the first two premises. The only conclusion yields itself after at least three premises. This can be illustrated using the former example.

Every C is B. (p1)
Every B is D. (p2)
Every D is A. (p3)
Every A is E. (p4)
∴ Every C is E. (c)

- 2) Reductio ad Absurdum (*al-qiyās al-khulf*). In this kind of syllogism, the thing in question is proven by disproving its contradictory. For example, if one were to deny that, 'some animals are not human'. Let us assume that;

Every animal is human.
Every human is rational.
∴ Every animal is rational.

But not every animal is rational. Therefore the assertion that 'every animal is rational', is an absurdity. It follows then that 'not every animal is human'.

- 3) Induction. Although not mentioned by al-Abharī, we may say that this type of proof is presumptuous in the sense that universality is assumed for the majority of individuals, and does not allow for certainty because the conclusion is only a probability. Incomplete induction, according to Ibn Sīnā, is not scientific due to the reasons already mentioned.⁶⁰

- 4) Analogy. Again this subject is not entertained by al-Abharī however, judgment in analogy is made about a particular on the basis of its likeness with another

⁶⁰ Ibn Sīnā *Remarks and Admonitions*, 129.

particular. Their similarities may be only applicable in some respects and therefore, analogy cannot offer certitude. According to Ibn Sīnā, analogy is the weakest form of proof and is therefore not scientific.⁶¹

We are not going to concern ourselves here with the terms of a syllogism. In this respect al-Abharī is quite lucid. Instead we will concern ourselves with a brief discussion concerning the figures of a syllogism. There are four figures of a categorical syllogism; however, like Ibn Sīnā before him, al-Abharī only admits three:

- 1) The first figure is where the predicate is the minor premise and the subject is the major one.⁶²
- 2) The second figure is where the predicate is found in both minor and major premises.
- 3) The third figure is where the subject is found in both minor and major premises.

Al-Abharī includes an abridged discussion on the conclusive moods of the three figures which is quite lucid and detailed, and therefore there is no reason to explain them further. Rather, we shall discuss the kinds of syllogism al-Abharī singles out for discussion. He concentrates on two kinds which we shall now discuss: conjunctive, and repetitive syllogisms.

i. Conjunctive Syllogism

If the form of conclusion or its contrary is not mentioned in the premises, then this kind of syllogism is called conjunctive. Conjunctive syllogism is classified accordingly into five groups with respect to the composition (i.e. the form) of its premises.

- 1) Both premises are composed of a conjunctive proposition.

⁶¹ Ibid., 130.

⁶² According to Ibn Sīnā, the first figure "...had been found perfect with much goodness .." See *Ibn Sīnā Remarks and Admonitions*, 134.

- 2) Both premises are composed of a disjunctive proposition.
- 3) One is a categorical proposition, the other, a conjunctive proposition.
- 4) One is a categorical proposition, the other, a disjunctive proposition.
- 5) One is a disjunctive proposition, the other, a conjunctive proposition.

Ibn Sinā, in his *Ishārāt wa'l-Tanbīhāt*, classifies them a little differently. Although he mentions the aforementioned five, he also includes a sixth group in which both premises are composed of categorical propositions. Fenārī, in his *Sharḥ Isāghūjī*, also mentions this sixth group.⁶³ The mood of the premises according to which figure they are classified, with the exception of the first figure, is a common trait in all figures. The moods from the first figure are exempted because their conclusions, reached by necessity, are apparent.

ii. Repetitive Syllogism

If the conclusion or its contrary is repeated in either of the premises, this kind of syllogism is called 'repetitive'. Al-Abharī mentions that one of the propositions of an exceptive syllogism is composed of either:

- 1) A conjunctive which is a universal affirmative cogent, the other is an assertion that either the antecedent is or the consequent is not, and from that assertion follows that the consequent is or the antecedent is not, respectively. We may cite the following example:

Whenever this is a human it is an animal.
But it is a human.
∴ It is an animal.

⁶³ Alparslan Açıkgöç, "Fenārī'nin Isaguci Şerhi", unpublished graduation thesis, Ankara Üniversitesi İlahiyat Fakültesi, 1974.

The consequent of the first premise is repeated in the conclusion by virtue of the antecedent being affirmed in the second premise. The same is also true for the contradictory of the above cited example. In each case, this kind of syllogism can only lead to true conclusions.

Or:

- 2) A veritable disjunctive which is a universal affirmative antagonistic, the other is the same as the preceding. Al-Abharī does not offer any examples, therefore, we have tried to illustrate this kind of proposition with the following archetype:

This number is either even or odd.
It is even.
∴ It is not odd.

In the above example, the antecedent is affirmed in the second premise in which case the consequent is denied in the conclusion. In other words, if the truth of the antecedent is admitted then it is an affirmation that something is. If the antecedent is rejected (i.e. It is odd), what follows in the conclusion is its contradictory (i.e. It is not even). This is known as being 'mutually exclusive' (*māni'at al-jam'*). If both the antecedent and the consequent are rejected, then this is known as being 'totally exhaustive' (*māni'at al-khuluww*), for example; this is either a thing which is not a human or a thing which is not a plant.

b. The Matter of Syllogism

The matter of syllogism, as we have pointed out is either a certainty or a non-certainty. In other words, it is concerned with those propositions whose truths are reliant upon certitude and those reliant upon non-certitude. There are of five kinds of syllogism with

regard to its matter, and are referred to by Aristotle as the five arts (*al-sinā'at al-khamsah*), or the pendants of logic. The following are classified by al-Abhari.

i. Demonstration

This kind of syllogism is composed of certain premises in which the conclusion, drawn from these premises, is certain. This type of syllogism is considered to be scientific, because it relies on certitude and is therefore one in which the truth can be assured. We may say that the aim of demonstration is to produce a declaration (*taṣḍīq*). There are two kinds of demonstration. A properic demonstration (*al-burhān al-limī*) is a kind of syllogism whereby reasoning proceeds from the cause of a thing to its effect in order to prove that a thing is, and why it is, both in the mind and in external reality. Conversely, a quaiatic demonstration (*al-burhān al-innī*) is a kind of syllogism whereby reasoning proceeds from the effect of a thing to its cause in order to prove only that a thing is, in the mind alone. Ibn Sinā refers to the former as causal demonstration, and to the latter as factual demonstration.⁶⁴ The propositions, upon which these judgements (i.e. both in the mind and in external reality) are made, are certain (*yaqīnī*) propositions. Of these there are six:

- 1) Axioms. As soon as these propositions are uttered, the mind knows that they are true. They are propositions originating in man via his intellective faculty whose sole cause of declaration is its self.
- 2) Conventional propositions.
- 3) Empirical propositions are propositions whereby the senses in association with syllogistic reasoning lead to certainty.

⁶⁴ *Ibn Sinā Remarks and Admonitions*, 154.

- 4) Intuitive propositions in which judgment is arrived at through rational intellection; in other words, passing immediately from principles to conclusions.
- 5) Testimonials are propositions whose transmission causes declarative certainty, which are known through repeated confirmed narrations after having knowledge that the testimony given is not impossible.
- 6) Propositions whose proof accompanies demonstration.

The remaining four kinds of syllogism (with regard to its matter) are reliant upon propositions whose truths are not certain (i.e. are not self-evident or that they can be certain but on the basis of something else).

ii. Dialectical Syllogism

This kind of syllogism is not considered scientific because, while their judgements may be true, their truths rely on probability not on certitude. Like demonstration, a dialectical syllogism also seeks to arrive at declarations, however its judgment is made on the basis of non-certain propositions which are either:

- 1) Well known, which include those by general expediency, sympathy, propriety, and so on. The difference between these and axioms, is that when man is left alone by himself without any mental principles (basis), his mode of judgment can only be made by axioms alone.
- 2) Admitted. These form the basis for the aim of dialectical syllogism whereby judgment in them is based on the admission of the opponent. From this admission follows the discourse to silence him (i.e. the opponent).

iii. Rhetorical Syllogism

This kind of syllogism is also considered not-scientific by virtue of the aforementioned reason. Similar to demonstration and dialectical syllogisms, the aim of a rhetorical syllogism is to produce a declaration, and its judgment is also made on the basis of non-certain propositions without any assertion. They are either:

- 1) Accepted; these are received from reliable sources (e.g. a prophet, ascetics, people of knowledge, etc.).
- 2) Presumptions; these are self-explanatory.

It may also be possible to say of rhetorical syllogism that its aim is more a pragmatic guide in that its truths exhort man towards good conduct.

iv. Poetic Syllogism

Unlike the previous three, its aim is not to produce a declaration. In addition, it is also considered not-scientific because it is composed of non-certain imagined premises, inasmuch as these premises have a certain disposition and composition, which the soul receives by virtue of their truth.⁶⁵ In short, these are composed of feel-good propositions stated to imagine some things to be other than what they are, not stated to be a declaration of any kind.

v. Fallacy

This kind of syllogism has two aspects, according to al-Abharī. It is either:

- 1) Composed of premises resembling truth but contain an error of the form; this is called 'sophistry'. Its aim is to produce a false declaration and therefore can never be called 'scientific'.

Or;

- 2) Composed of premises resembling truth but contain an error of the matter. Al-Abharī does not make mention of this in his text. Similarly, the aim is to lead one into error.

We have now completed our analysis and commentary of the section on logic. In conclusion, in order for the reader to fully comprehend logic as a science the works of Ibn Sīnā are indispensable. If on the other hand what is intended is a brief summation of the salient features of logic more as an introduction, the *Īsāghūjī* of al-Abharī offers a more systematic lucid treatment. More importantly, the purpose of our analysis and subsequent commentary was only an attempt at systematizing the section on logic in order that it may

⁶⁵ *Ibn Sīnā Remarks and Admonitions*, 148.

appear more informative and clear to the reader. Therefore, while it would appear that much of our efforts were spent dealing with logic, it would suffice to say that it was indeed necessary. Since the section on logic is only afforded brief mention, it was incumbent upon us to elucidate, elaborate, and explain the more problematic concepts contained therein.

CHAPTER FOUR

TEXTUAL ANALYSIS AND COMMENTARY: PHYSICS

In the previous chapters we have presented the *Hidāyah* in such a way that our presentation would reflect al-Abhari's system as a cosmological scheme. In this chapter we are compelled to say something that would justify the arrangement of physics after logic before we can embark upon an analysis of the text. It is not our intention to scrutinize the text down to its minutest detail; only an examination and criticism of the more salient features in his cosmological scheme will be discussed. In other words, the chapters which do not directly deal with cosmology as a system, for example, meteorological phenomena, will not be examined.

We summarize al-Abhari's system as follows. We have mentioned that the system projected by al-Abhari follows that of Ibn Sīnā, the system is conceived beginning from the simplest elements which are simple concepts. In the previous chapter we have shown how knowledge is acquired from this primary level until its full comprehension in al-Abhari's system. If this is the basic epistemological principle it should be applied to our knowledge of the universe as well. In this sense, logic is the methodological tool. The same principle applies to the Aristotelian system but it may not appear evident to the inquiring mind to elicit this very epistemological principle. This I believe is largely the Avicennan contribution to philosophical thought.

Once logic is accepted as an epistemological principle in our attempt to grasp reality, one may pose this question: What is the single most basic cosmological element upon which our knowledge of the universe may be constructed? The simplest element in this case is reflected as "being". But in this sense, in other words in the physical sense, being in general is applied to things. Therefore, one may say that al-Abhari's

cosmological system begins with the notion of “thinghood”. Things in general have an element of form and matter in potentiality. When corporeal form is receptive of accidents it is called “substratum”. When accidents are thus attached to the substratum it is called “substance”, a defined, concrete individual. Analyzed in its concrete form, primary substances are reducible to four primary elements; fire, air, water, and earth. When these four primary elements are combined in a certain way, what is produced are minerals, plants, animals, and ultimately man. This hierarchy of being, exhibits a certain way of perfection or entelechy (*kamāl*). The first entelechy, achieved at the level of plants is referred to as the vegetative soul which has three powers or faculties. These are the powers of nutrition, growth, and reproduction. The power of movement is absent except within themselves, in other words they cannot transport themselves from one place to another. By virtue of this, we may infer that they do not have the powers of perception because the purpose of perception, which is movement, is also absent. The second entelechy, achieved at the level of animals is referred to as the animal soul. In addition to the three powers possessed by the vegetative soul, the animal soul has the powers of voluntary movement and perception. The third entelechy, achieved at the level of man is referred to as the rational soul. In addition to the five powers possessed by both the vegetative and animals souls, the rational soul has the powers of deliberation and reason. The corporeal universe terminates at this level of perfection. Then come the heavenly spheres. These too are arranged hierarchically according to their degrees of perfection. The lowest of these spheres corresponding to the tenth emanation known as the Active Intellect (*al-‘aql al-fa‘āl*), is the sphere of the moon. Each preceding emanation is a degree of perfection above the subsequent emanations, and this continues in ascending order ultimately terminating with the First Intellect which results from the True One, or God. This then is the cosmological schematization of al-Abhari in particular, and the Peripatetic philosophers (*Mashshā‘iyyūn*) in general.

Our analysis of and commentary on al-Abhari's physics will trace the chapter titles of his *Hidāyah*. But in order to present a systematic treatment we shall follow the classical subdivisions of physics as projected by his *Mashshā'i* predecessors. If one pays attention to the topics discussed his general subdivisions can be represented as three branches of physics. His treatment of other branches such as, mineralogy, zoology, and botany are included in the third division which we shall call secondary physical sciences. It seems, therefore, that the physics of the *Hidāyah* has three subdivisions: elementary sciences of physics, astronomy of the intellects, and secondary physical sciences (meteorology, mineralogy, botany, zoology, psychology).

A. ELEMENTARY SCIENCES OF PHYSICS

This is primarily the elementary sciences of physics because it discusses motion. But since the elementary sciences of physics discuss primary concepts utilized in physics in general, we refer to it as the elementary branch. We have mentioned that al-Abhari's system begins with the notion of "thinghood", hence his discussion must begin with that which is common to things, in particular to corporeal bodies. The section on physics therefore begins with a refutation of the indivisible particle. The reason he begins with this discussion is because it is intended as a propaedeutic to his cosmological scheme. The indivisible particle is not conceived as the building blocks of the cosmos. It is prime matter which is conceived as such.

As we have previously mentioned, al-Abhari begins the section on physics with a discussion concerning the refutation of the indivisible particle. He approaches the problem using dialectical arguments. We have shown in the previous chapter that this kind of argument cannot be considered scientific because, while their judgements may be true, their truths rely on probability not on certitude and that unlike demonstration, its judgment is made on the basis of non-certain propositions whose aim in part is to prove

something based on the admission of the truth of the propositions of the opponent. What al-Abhari is refuting assumes infinite divisibility. Let us consider instead that the particle is an object of knowledge. According to Ibn Mattawayh an object of knowledge must either be an existent, or a non-existent. If it is an existent, it must have either come into existence at a defined time, or did not come into existence at a defined time. The object of knowledge which does not have a defined time, nor is said to have come into existence can only refer to God. Therefore, only that which is created has the attribute of coming into existence at a defined time.¹ If we were to consider this to be an exact and precise definition of an object of knowledge, then the object of knowledge cannot (in actuality) be infinitely divisible. This is because that which is infinitely divisible in actuality cannot be defined, and hence, by virtue of this cannot be known. This is not the object of knowledge; Professor al-Attas explains:

...the pursuit of knowledge is not an endless search. Were its quest to be without end, then it would be impossible to attain to knowledge in the span of time to which there is a beginning and an end, and it would render knowledge itself to be meaningless...There is a limit of truth in every object of knowledge, and every object of knowledge has a different limit of truth...True knowledge is therefore knowledge that recognizes the limit of truth in every object.²

It is clear therefore, that that which has no limit of truth cannot be defined which would in turn render the object of knowledge meaningless. In addition, that which is infinitely divisible assumes that it is itself infinite and presupposes that time cannot be predicated of it. But the object of knowledge by definition assumes that it is predicated of a defined time appropriated for its coming into existence.

¹ We have paraphrased the ideas ascribed to Ibn Mattawayh from Alnoor Dhanani, *The Physical Theory of Kalām: Atoms, Space and Void in Basrian Mu'tazili Cosmology*, (Leiden: E. J. Brill, 1994), 15-16. The original text is only in manuscript form which was unavailable to us for perusal.

² *Prolegomena*, 135.

Al-Abhari's approach to this problem is that of a mental conception. The infinite divisibility of particles exist as a potentiality only in the mind. He cannot mean that this potentiality exists in actuality because, by virtue of definition nothing would be known and consequently the objects of knowledge become the objects of confusion. The mind is able to predicate infinite divisibility for an object of knowledge because the mind conceives objects of knowledge as being composed and are thus contained in something having defined parameters. For example, when the mind thinks of a cube, it automatically assigns length, width, and depth, all enclosed within a defined set of borders. By virtue of these borders it is potentially divisible infinitely. This is because if one were to divide the cube in half, the result would be two cubes also contained within defined borders; then each of the two cubes are again potentially divisible into equal halves. Now we are left with four cubes contained within a defined set of borders potentially divisible into equal halves and so on *ad infinitum*. This kind of potential infinite divisibility is only possible in the mind. The resultant objects of knowledge in the mind are not 'real' but rather exist as essences in the mind.

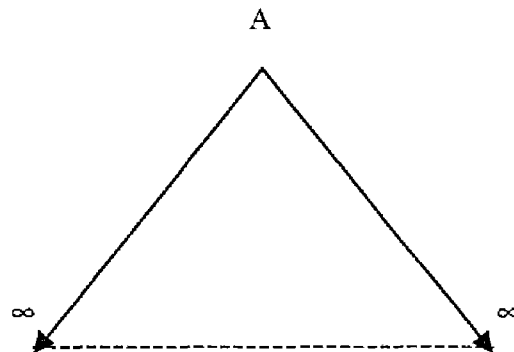
If it were assumed to be true that a particle is infinitely divisible, then one must assume that it is self-subsistent. If it is self-subsistent then it is either not in need of a creator or agent in order for it to be or it is in need of a creator. If we assume the latter, then at some defined moment it would be created and therefore it cannot be infinite nor can it be infinitely divisible. If on the other hand it is not in need of a creator then it must be assumed to have subsisted simultaneously with the True One, or God. But we have assumed that the particle is bounded and therefore is subject to a particular place; if it subsisted simultaneously with God, then place is also predicated of God, and this is impossible. In addition al-Abhari argues in his discussion on space (*al-makān*) that things exist in a place and that there is no void. If we were to take the above assumption to be true, that a particle is bounded and therefore exists in a place, and since al-Abhari denies

the existence of the void and consequently place, then a particle cannot be bounded. But if it is not bounded, one cannot conceive of it in actuality and hence, it cannot be defined which ultimately renders it unknowable. We have mentioned previously that the objects of knowledge can be known with certainty, therefore while the argument may be valid, it is unsound.

Al-Abhari's arguments concerning the refutation of the indivisible particle employ mathematical proofs. He assumes that if a particle were assumed to be in between two particles, then it is divisible since the middle particle is attached to the other two on either side. Why must the particles be in touch with one another? Is it not equally possible for all three particles to exist by themselves without touching one another? Al-Abhari argues that this cannot be the case because it would assume the existence of the void and this is not possible in his corporeal cosmological scheme.

The first realization of form in matter is corporeal form. Al-Abhari adopts the opinion of Ibn Sīnā and (ultimately) Aristotle that bodies are composed of finite heterogeneous parts each of which are homogeneous and infinitely divisible. The idea of homogeneity must be preserved for if the heterogeneous constitutive parts were themselves heterogeneous, then if one part exceeds the others by one part or more, then that part would be more corporeal than the other parts, and this is clearly inconceivable. As far as the dimensions of the constitutive parts, al-Abhari does not explicitly mention them. Here though al-Abhari inadvertently poses an interesting question. He argues that all bodies are finite, while their constitutive elements are infinitely divisible. His argument is that if bodies were not finite it would be possible for two extensions to come forth from a source extending like two sides of a triangle to infinity. The distance between the two sides is potentially measurable. But if the sides extend to infinity then the distance between them at the "infinite points" is infinite, and this leads to an absurd conclusion. We may illustrate his argument by the following diagram. Let A be the point of origin,

the two lines extending from A are said to extend to infinity. Logically speaking, it is not possible to measure the distance between two infinite points, yet we are able to illustrate the problem as such mathematically.



Suppose the assumed triangle is an isosceles triangle and the angle at A is 90 degrees, then the distance between the two lines at the infinite points would be the square root of infinity. But the square root of infinity is also infinity and here is an impossibility, according to the Muslim philosophers.

The preceding example proves that an actual infinity is not possible and is therefore inadmissible; hence, this presents an antinomy with regard to al-Abhari's primary cosmological doctrine. We have said that he is of the opinion that the constitutive elements of a body are homogenous and infinitely divisible. How is this possible if on the one hand these elements are bounded within the structure of the body, and hence are themselves bounded, while on the other hand are infinitely divisible when it has been shown that infinity is an inadmissible principle? By employing a similar argument we may assume the extension of two lines from a point originating at one of the infinitely divisible constitutive elements. If these elements are bounded within a finite body the

two lines cannot be extended to infinity; at some defined point they will reach to the inner boundary of the body and are therefore measurable. Hence, they are finite. Although al-Abharī only offers one argument in refutation of the finite particle, there are at least eight arguments put forth by Ibn Sīnā to further refute the finite divisibility of bodies.

The second realization concerns form pertaining to species. Form cannot exist independently of prime matter because according to al-Abharī if it did, it would either be in a place or not. If it were in a place then it would be divisible and this is impossible. Nor can prime matter exist without an efficient cause. Before the combination of both prime matter and form, each exists only in potentiality. Priority and posteriority therefore, cannot be predicated of them. Prime matter is thus capable of receiving form at a specified time when the efficient cause simultaneously brings into existence prime matter and form pertaining to species. This form, once it has been brought into individual corporeal existence is referred to as corporeal form (*ṣūrah jismāniyyah*).³ It has two aspects; one of being potentially capable of receiving accidents, the other of actuality wherein accidents actually inhere. The former aspect is called substratum (*maḥall*), whereas the latter is called substance (*jawhar*). Therefore, substance is the actualization of the substratum. In addition, substances are of two kinds, namely primary substances and secondary substances. The latter are universal concepts consisting of genera and species only. The former refer to particular things.

In reference to universal concepts, they exist in reality as essences. When made in reference to genus they are called corporeal form (*al-ṣūrah al-jismāniyyah*). When made in reference to species they are called forms pertaining to species (*al-ṣūrah al-naw'iyyah*), which is the second realization. Shape (*al-shakl*) is neither prime matter nor form, it is an accident inhering in substance. It results from the combination of prime

³ It is corporeal form which is classified under the second realization.

matter and form in actuality, and this is the third realization. Shape is determined by the individual form of a particular thing. Therefore, secondary substances have universal shapes by virtue of the fact that they are determined by universal forms. Since secondary substances are perceived to exist in reality as essences, by association one may conclude that there must also be universal forms. However these universal forms are not manifest, they only exist as essences by virtue of the secondary substances themselves existing as essences.

Thus, both corporeal form and form pertaining to species inhere in primary substances. These primary substances in their simplest forms are the four elements; air, water, fire, and earth. When these four elements are combined according to their intended, determined, or as al-Abhari says “natural” disposition, they give rise to minerals, plants, animals, and man. Secondary substances inhere in all the elements and consequently in all minerals, plants, animals, and man.

As for motion (*al-ḥarakah*), al-Abhari follows the Avicennan tradition which is ultimately derived from Aristotle. In the most general sense, motion is an accident inhering in substance. Therefore it is an accident of an existent thing insofar as the thing exists, because an existent thing does not need the accident of motion in order for it to be a particular thing. If this is assumed to be true, then an existent is either in perpetual actuality, in perpetual potentiality, or in actuality in one respect and in potentiality in another. As for the first supposition, if an existent were in perpetual actuality it would not be able to traverse any distance. In order for it to traverse any length it would first have to have the potentiality to move. If it were perpetually in potentiality, actuality would not be possible. Furthermore this is absurd with regard to existents except if actuality of potentiality were belonging to it, or by virtue of the fact that it is in their nature to be constituted of prime matter. We have mentioned the fact that prime matter, when it is considered in itself it is potentiality of actuality. If we consider the third possibility, its

essence must be constitutive of potentiality in one respect and of actuality in another. However, actuality has priority over potentiality, and so that which is potential must become actualized in reality. In this way the existent is able to move. As for that which is in actuality in one respect and in potentiality in another respect an existent has to pass from being in potentiality to being in actuality by a means other than being potential otherwise it cannot be said to be an existent in potentiality. Movement is either gradual, or through gradations, or all at once. Movement in the most general sense occurs both gradually and all at once. Therefore, there is no distinction with regard to motion except that it proceeds from its potentiality to actuality. Yet motion, in the *mashshā'ī* physical cosmological conception proceeds gradually; this then is called motion, the absence of which is known as a state of rest. Therefore, motion in the true sense is a gradual becoming from potentiality to actuality, as opposed to a sudden manifestation of actuality.

If one were to assume that a body is in a [certain] place and that it is possible for it to occur in another place, then there are two possibilities. First, that it occurs in the first place and has the potentiality of being in the second place. Indeed everything whose occurrence is possible, constitutes its perfection. Therefore, the fact that a body is in the first place is perfection, however, the potentiality for it to be in the second place is undoubtedly prior to its occurrence at the second place; otherwise it would not be possible for that which is in potentiality to arrive at the second place in gradual fashion, which is how motion is defined. Motion is only perfect with respect to its being considered as potentiality. So therefore, motion is the first perfection with respect to that which is in potentiality. Therefore, potentiality is considered the first perfection or entelechy of a thing in potentiality, for motion is not perfect in corporeal actuality. Motion then is the fourth realization.

All motion exists in a continuum. This continuum is time. The concept of time is defined by al-Abhari as “the measure of motion”. This definition of time is also afforded

by the illuminationist philosophers, al-Suhrawardī in particular.⁴ However, the illuminationist philosophers, and the *mutakallimūn* differ radically with the philosophers on the nature of time. For al-Abharī, time has no beginning and no end. This opinion is not shared by Suhrawardi or the *mutakallimūn*. For them time is created and finite. The fact that time is without beginning or end means that it is incomplete. Al-Abharī has already illustrated the notion that motion is only perfect with respect to its being considered as potentiality and is not perfect in corporeal actuality. Therefore since it is not perfect in actuality it cannot be said to be complete, hence it is incomplete. Since completeness and incompleteness are incompatible, time can only be applied to that which is in actuality and not to that in potentiality. Since motion is the actualization of its potentiality, it can be measured.

As for time being considered eternal, Al-Abharī considers time to be an existent. This is evident from his argument; he proposes that if time were created, there must have been a time when it did not exist, so there would be a time before time. This is a perfectly logically valid argument if time were considered an existent. Indeed it is logical and valid, yet it is unsound. Since al-Abharī considers time to be of the same genus as the indivisible particle, the conclusion he makes concerning time is also based upon the same premise. However, the *mutakallimūn* are of the opinion that time is composed of “atoms which cannot be further subdivided”⁵, hence, it is created. Since it is the measure of motion, it is not “real” because it is continually undergoing “renewal and change, yet its renewal is not with respect to itself, but with respect to its locus, that is to say motion”.⁶ If understood in this context, time behaves as an accident of motion. Indeed motion itself is an accident of existents. Therefore, in our opinion, time, correctly defined, is the accident

⁴ See, Bilal Kuşpınar, *İsmā‘il Ankaravī on the Illuminative Philosophy*, (Kuala Lumpur: International Institute of Islamic Thought and Civilization, 1996) 194.

⁵ See *A Commentary on the Creed of Islam: Sa‘d al-Dīn al-Taftazānī on the Creed of Najm al-Dīn al-Nasafī*, 25.

of creation. When we say that time is the accident of creation we do not mean that priority and posteriority can be predicated of time, we simply mean that time occurs simultaneously as a result of creation. The ancient Atomists also had a similar inclination concerning time although their views were more vague than defined.⁷ The discussion on the concept of time marks the end of the elementary sciences of physics.

B. THE ASTRONOMY OF THE INTELLECTS

It is clear in the *Mashshā'ī* context that intellects refer to celestial beings. Immediately following the chapters pertaining to the corporeal cosmos, al-Abharī directs his attention to the celestial cosmos, indicated as the second science. The third science, which marks the conclusion of the section on physics includes what we will call mineralogy and biology all classified under the heading "elements". We have made an attempt here to arrange the topics in order following the sequence of being.

We need only briefly mention, in reference to the celestial cosmos, which is the logical progression from the corporeal cosmos, that concerning motion with respect to a sphere. We have previously explained the nature of motion in Aristotelian terms as the actualization of something potential. How then does motion apply to celestial cosmology? In answer we may say in general it is the measure of change in reference to celestial bodies. What kind of motion can be applied to celestial bodies? One has to examine the nature of motion in terms of it being either rectilinear or circular. Al-Abharī argues that a celestial sphere moves in a circular manner. Historically, Plato is credited with the idea of uniform circular motion, based primarily on the assumption that heavenly bodies were in fact divine beings, and as such, the only motion befitting to them should be uniform and

⁶ See Ismā'īl Ankaravī on the *Illuminative Philosophy*, 194.

⁷ See Anders Wedberg, *A History of Philosophy*, (Oxford: Clarendon Press, 1982), 33

circular.⁸ This idea was later developed further by Aristotle. By virtue of his definition of motion, in addition to Platonic influence concerning the motion of heavenly bodies, it seems clear that motion, when applied to celestial spheres, cannot be defined in terms of potentiality and actuality but rather, in terms of perpetuity. If the motion of a celestial sphere is said to be uniform, the only motion conforming to such a principle would have to be circular and as such, cannot succumb to the predications of in potentiality and in actuality. If in potentiality and in actuality were predicated of it, when it is in a state of potentiality and then becomes actualized and then again to being in potentiality, this would simply imply that its motion is limited and interrupted; the kind of motion personified by rectilinear motion. In such a condition, motion, for it to be actualized would require a cause other than its being in potentiality. Therefore, in order for a thing to move away from the point at which it was would require an infinite series of causes to affect actual motion. From the preceding argument another conclusion may be drawn; namely, an infinite series of potentialities. In circular motion however, a thing cannot come back to the exact point of its being in potentiality having already traversed that very same point in actuality. Therefore, the motions of celestial spheres are said to be circular.⁹ Proofs concerning this argument will become manifest in al-Abhari's metaphysical premise with regard to the eternity of the world.

C. SECONDARY PHYSICAL SCIENCES

We refer to this discussion as secondary sciences with respect to subject matter discussed in other branches which are primary. The primary sciences alluded to here, deal primarily with the simplest elements, air, water, fire, and earth. These then constitute the lowest of the low, or the most basal form of species. Inanimate forms follow in ascending hierarchical order. Indeed, unlike the most basal elements which are necessarily

⁸ Ibid., 72-73.

susceptible of corruption by virtue of their “instantaneous temporality”, their forms are preserved for an amount of measurable time. What we mean by instantaneous temporality, is that their forms are not preserved for an amount of perceivable time giving the illusion of being instantly corrupted the moment they are formed. The lowest rank of the inanimate forms are the most volatile resembling the basal elements. “Their rank is close to the rank of the first elements, such as gypsum, lime, ammonia and things of this nature”.¹⁰ The ascending hierarchy of perfection experiences different levels of existence, each a degree nobler than the preceding one, until finally it terminates at the highest entelechy within that species. At this level, the highest entelechy within the species of inanimate beings closely resemble the lowest form of plants, such as the coral reefs and similar things.¹¹ This continues until the highest entelechy within the species plant is achieved, where the lowest form of the species animal shares a close resemblance to the highest entelechy of the preceding species. Some examples put forth by al-Shirāzī include the date palm.¹² Now we have proceeded to the level of animals, where the most lowly amongst them “do not copulate (*yatazawway*), nor do they leave behind a similar (*al-mithl*); but they simply reproduce, like the worms, flies and other lower insects”.¹³ The receptivity towards excellence continues in like manner from a lower degree of perfection towards a higher, nobler degree until the highest entelechy possessed of the species animal closely resembles the lowest degree of perfection assigned to man.¹⁴

⁹ See *Ismā‘il Ankaravī on the Illuminative Philosophy*, 194-196.

¹⁰ Šadr al-Dīn al-Shirāzī, *al-Hikmah al-Muta‘āliyah fi’l Asfār al-‘Aqliyyah al-Arba‘ah*, ed. by Muhammad Ridā al-Muẓaffar (Beirut: Dar Ihya al-Turāth al-‘Arabī, 3rd ed. 1981), 5, 344 Translation Prof. Alparslan Açıkgenç, paper delivered at SOAS, London, May 2001.

¹¹ Ibid.

¹² Ibid, 345.

¹³ Ibid.

¹⁴ Al-Shirāzī offers an interesting in depth description of the different stages suffered by each prior stage of perfection in its quest for a nobler entelechy. In describing the characteristics from within the hierarchical order of the animals, al-Shirāzī details how if an animal is given cunning or flight it is less noble than the one given ferocity and talons, all the instruments of a predatory animal. One may even warrant a guess that the modern scientific interpretation with regard to the “survival of the fittest” maxim which found its roots in the study of genetics, resemble the hierarchical order of being postulated by al-Shirāzī

Man is composed of both body and soul. The true nature or reality of man is his soul although the body also shares in that reality. The seat of knowledge in man is one single reality commonly referred to as spirit (*al-rūh*), which is in a continual state of activity. Spirit is a collective term for man's faculties sometimes referred to as; soul (*al-nafs*) when it is in the state of administering the body or when referring to itself; (*al-qalb*) when it is in the state of receiving intuitive knowledge; (*al-'aql*) when it is in the state of intellection.¹⁵ All have a dual aspect; one material, the other spiritual. In reference to something material it refers to the animal nature of man. When the term soul is used in the material sense it is accepted to mean an individual existent. Similarly, the heart understood in the material sense assumes the muscle located in the anterior breast of man committed to supplying oxygen rich blood to the brain, simultaneously shunting oxygen deficient blood back to the chambers of the heart. The same is also true of the intellect which when referred to in the material sense points to the frontal lobes of the brain. Man is the highest perfection or, in al-Abhari's words, entelechy, in the hierarchy of corporeal being by virtue of his being endowed with the faculty of reason, one of the principle inner faculties of the soul.

With reference to the meanings of the four terms used in relation to the soul when they pertain to the soul of man, they all indicate an indivisible, identical entity, a spiritual substance which is the reality or very essence of man.¹⁶

It is in this sense that al-Abhari refers to man as the first entelechy (*kamāl*). This further implies that there is a hierarchy of perfection of being. As noted previously the rational soul of man is possessed of two more powers in addition to the ones possessed by the animal soul the powers of deliberation and reason. These powers are possessed in potentiality by all humans. What distinguishes them in terms of perfection is the element

¹⁵ See *Prolegomena*, 143-146. For the following descriptions pertaining to the faculties of the soul, see, "The Nature of Man and the Psychology of the Human Soul" in the *Prolegomena*.

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of consciousness particular in every individual. So the one whose level of consciousness is more manifest than the other attains a greater degree of perfection. Therefore, the opposite, namely the level where man being unconscious with regard to his potentiality, never manifests that potentiality as actuality and in essence is similar to the highest degree, or utmost limit of the animal realm. The only distinction separating man from beast is that the former is capable of "intellection, distinction and intelligent speech (*al-nuṭq*) and is endowed with instruments (*al-Ālat*) that he uses and with a form suitable for him. Therefore, when a being [i.e. man] has attained to this level, he moves towards knowledge and yearns for sciences".¹⁷

Among the human levels, some belong to those who reside at the farther edges of the civilized world in the north and south; such as the regions beyond the Turks, that is the lands of the Gog and Magog; also the regions beyond the black Africa (*al-zanj*) and people resembling them, who cannot be distinguished from the ape except by a small degree. Then increases in them the faculty of discernment and understanding so much that they reach the condition of those who reside in the proximities of the civilized world. In them there come about intelligence and the fast reception of excellences.¹⁸

It is at this level that man becomes more and more aware of his faculties of discernment or perception. He is thus able to abstract objects of knowledge for consideration in the second faculty of the rational soul, the sensitive imagination or representative faculty (*al-khayāl* and *al-khayāliyyah* respectively).¹⁹ This faculty is distinct from the first faculty, common sense (*al-ḥiss al-mushtarak*), in that it is able to retain the abstract images of perception.²⁰ This stage of awareness in man continues increasing in excellence until

¹⁶ *Prolegomena*, 148.

¹⁷ *Al-Ḥikmah al-Muta'aliyah fī'l Asfār al-'Aqliyyah al-Arba'ah*, 347

¹⁸ *Ibid.*

¹⁹ See *Prolegomena*, 151

²⁰ See *Prolegomena*, 151. Prof. al-Attas explains that the common sense "only receives the data provided by the external senses gathering together similar as well as dissimilar ones, but does not retain what it receives."

gradually he becomes conscious of the third faculty of the soul, the estimative faculty (*al-wahmiyyah*). It is by this faculty "where judgements and opinions are formed".²¹ Al-Shirāzī points out:

This continues as far as it arrives at a point where they commence to acquire excellences additional to those of the animals as such. They also begin to obtain the intelligibles through their own will, endeavor and effort until they reach the Realm of the Heavenly Sphere and that of the Supreme Angels. This, insofar as man is concerned, is the highest human level. Within human all beings are [essentially] reduced to one unit (*yata'ahhad*) and the beginning points [of these beings] are conjoined with their ends and vice versa. This [great unity] is called the Circle of Existence (*dā'irat al-wujūd*), the first half of which is the descending arch and its other half is the ascending arch. For a circle is that which is defined as a single line that begins by moving from a point where it also ends.²²

We have already made reference to the physical faculties of the soul, therefore there is no need to repeat them at this juncture. However, we have only mentioned three internal faculties. The faculty concerned with meaning is the imaginative faculty (*al-mutakhayyilah*). Prof. al-Attas explains:

...in relation to the human soul it is the faculty of rational imagination (*al-mufakkirah*)...this faculty is cogitative (functioning) as the manager of the data of theoretical reason, combining them and arranging them as premises from which it deduces informing knowledge.²³

The ascending hierarchy of being continues in similar fashion, except that the highest entelechy or degree of perfection attained by man is the Acquired Intellect. In this sense, he does not simply resemble it, he becomes the Acquired Intellect (*al-'aql al-mustafād*).

²¹ Ibid, 152.

²² *Al-Hikmah al-Muta'aliyah fi'l Asfār al-'Aqliyyah al-Arba'ah*, 347.

²³ See *Prolegomena*, 154. The word in brackets is my own although I have tried to remain true to the meaning of the text.

We have thus far presented the cosmological system of al-Abhari, which ends at the Acquired Intellect. This then is the end of the section on physics. The section on metaphysics begins then at the level of the higher Intellects and their relation to knowledge. Once again al-Abhari's system follows a certain method which will be explained at the outset of our commentary and analysis.

CHAPTER FIVE

TEXTUAL ANALYSIS AND COMMENTARY: METAPHYSICS

Our presentation of the *Hidāyah* thus far has been an attempt to reflect al-Abhari's system as a cosmological scheme. In this chapter therefore, we are compelled to say something that would justify the arrangement of metaphysics after physics before we can embark upon an analysis of the text. It is not our intention to scrutinize the text down to its minutest detail; only a discussion of the more salient features in his ontological scheme will be dealt with.

We have previously mentioned that the system projected by al-Abhari follows that of Ibn Sīnā. In this chapter, the metaphysical system is conceived beginning from an ontological structure of being. Knowledge concerning being is then the basic ontological principle applied to our knowledge of God. Once again logic is the principle methodological tool, but as we shall see, it is the manner in which logical principles are applied that conclusions concerning God as understood by Islām, fall short. The reason for this shortcoming I think is that the Aristotelian forms of syllogism are being applied with respect to God. This being the case, conclusions arrived at through necessity, run antithetical to the Qur'anic descriptions concerning God and His attributes. By employing such a method it is not possible to arrive at conclusions which reflect Reality and Truth in the Qur'anic sense. What we mean is that there are two methods of arriving at the truth; one arrived at by virtue of logical principles, the other by virtue of ontological distinction. Our commentary concerning the chapter on logic clearly states that in logic, an utterance said to convey truthfulness (*sidq*) is distinguished from that said to convey falsehood (*kidhb*). The Arabic terms employed to reflect meaning with regard to truth and falsehood cannot then be applied to ontological arguments concerning God and His creation. Instead, the Arabic language specifies the word *ḥaqq* in reference to Reality and Truth,

and its antonym, *bāṭil* in reference to falsity. As for the latter, while an utterance may be said to convey truthfulness as reflected by the term *ṣidq*, yet its reality may be false which is reflected by the term *bāṭil*. For example, if one were to say that an idol exists, and if the utterance were to actually correspond to something in existence, then we say that it is true that an idol exists. But truth in this sense only refers to the utterance and not to the idol for its reality is indeed false.¹ Confusion resulting from the indiscriminate use of logic in answer to matters pertaining to method as a basis for theological arguments concerning God is, I believe, one of the main reasons for the subsequent attack on logic after Ibn Sīnā by al-Ghazzālī and Ibn Taymiyyah in particular, although al-Ghazzālī's attack was not directed at logic *per se* but rather at the logical premises whose epistemological and ontological assumptions were antithetical to the teachings of Islām. In truth al-Ghazzālī was well aware of the distinction we have alluded to above and applied arguments derived from logical principles whose premises were founded upon Reality and Truth reflected in Qur'anic doctrine. Ibn Taymiyyah on the other hand, perhaps misinterpreted this distinction and in consequence concentrated his attack primarily on logic for it was he who coined the famous maxim *man tamannaṭaqa tazandaqa*.

In the previous chapter we have offered a brief summary of the physical scheme of the *Hidāyah* as understood and interpreted by the philosophers. In their physical scheme the simplest elements are basic concepts upon which the simple notion of being is constructed. Things are composed of primary matter and form. The complex concatenation of substance from substratum, and corporeal form from primary matter and form does not exist in the conception of being of the *mutakallimūn*. For them, everything in existence is an indication of God's perpetual creative dynamism. The simplest elements are atoms which constitute the foundation for corporeal bodies. The basic

¹ The merits of this argument were conveyed to me by Professor Dr. Syed Muhammad Naguib al-Attas during one of our numerous conversations together.

premises for their syllogism are adduced from a revealed source, the Qur'ān. unlike the philosophers whose basic premises are derived using reason alone relying on the limited senses of man.

Earlier we have indicated that the *mashshā'ī* philosophers employed Aristotelian logic as a tool upon which arguments concerning the psychology of the Intellects, ontology, theology, and eschatology ultimately depended. We are not saying that the fundamental elements of the worldview of Islām based on revealed knowledge was not their primary concern. Indeed these fundamental elements were of primary concern and were the formulations upon which the foundations of belief rested, yet in trying to prove their conclusions they employed Aristotelian forms of syllogism, and as such Reality could not be predicated of existence. On the contrary, accident may be predicated of what is in existence, and hence, the prevalent view among the *mashshā'ī* philosophers was that essence is Reality whereas existence was viewed merely as an accident of that essence.

Let us turn our attention to a more detailed analysis with regard to the last statement concerning Aristotelian syllogism. Our example is concerned with the *mutakallimūn* conception of reality. According to the *mutakallimūn*, if one were to say:

Time is composed of atoms
Atoms exist as accidents
∴ Time exists as an accident

The form of the syllogism is valid and the argument sound. Yet the *mashshā'ī* philosophers would disagree in terms of the argument being sound. Although, the syllogism is valid, the premises of the syllogism would not be accepted by the *mashshā'ī* philosophers. In the first place, they do not admit atoms in their philosophical scheme, as we have previously shown. Nor do they admit of time being composite. More importantly, existence is, for the philosophers, a property. It is not immediately apparent

from the text of the *Hidāyah* that the philosophers consider property synonymously with accident. Nor for that matter is it clear from the text that a property can be predicated of that which is eternal. Therefore, for the casual reader and student of philosophy it would appear that the argument is not sound.

If one were to assume that a property cannot be predicated of that which is eternal, the *mashshā'i* counter argument may be represented by the following syllogism:

Existence is a property
Property is as an accident
∴ Existence is an accident

Once again the form of the syllogism is valid. But the premises of the syllogism would not be accepted by the *mutakallimūn* whose understanding of existence is that it is Reality. The *ṣūfī*'s do not accept that property may be predicated of existence, or for that matter that existence be predicated of existence for this is already a tautology. The syllogism introduced by the *mashshā'i* philosophers concerning existence is precisely the focal point of the discussion between essence and existence in Islamic sciences. More concerning this will be discussed in the first section of the metaphysics.

Unlike Ibn Sīnā, al-Abharī does not specify the purpose of metaphysics, nor does he attempt to define metaphysics, for in order to make a definition there must be a subject matter. Does the science of metaphysics possess a subject matter? One may assume implicitly, based on the arguments proposed by al-Abharī, that it does possess a subject matter, for we have indeed considered the fact that al-Abharī follows the Avicennan tradition. Therefore, in accordance with this tradition, he assumes that the meanings of such concepts like substance, accident, cause, effect, universal, particular, one and many, whose being is independent of bodies is given by their very definition and conceptualization.

Our analysis of and commentary on al-Abharī's metaphysics will trace the chapter titles of his *Hidāyah*. But in order to present a systematic treatment we shall follow the classical subdivisions of metaphysics as projected by his *mashshā'ī* predecessors. If one pays attention to the topics discussed his general subdivision can be represented as three branches of metaphysics, namely ontology, theology, and psychology of the Intellects. In addition though, al-Abharī discusses eschatology which is dealt with as part of his concluding remarks. His psychology of the Intellects and eschatology are by far the shortest sections of the entire *Hidāyah*. It is our intent to discuss eschatology as part of his metaphysics, and therefore, we propose to combine our commentary with regard to both his psychology of the Intellects and eschatology under a single subdivision, thereby eliminating the need to propose a fourth subdivision.

A. ONTOLOGY

In our examination of the text of the *Hidāyah* we encountered several terms cloaked in ambiguity. The most problematic of these terms is the term *wujūd*, which al-Abharī employs to express either being or existence. It is this dual use that confounds us here because there is no unambiguous distinction between the two meanings in al-Abharī's composition. Is there a clear ontological difference or is the difference obscure, or is there no difference at all? We have already considered the fact that al-Abharī is an essentialist, therefore, there is a difference between the two meanings. Our main problem is then to justify whether this ontological distinction is apparent. The text of the *Hidāyah* partially answers this question with an elucidation of the common features of being. We may conclude that *being* may be understood in two ways; firstly, as a purely mental abstraction referring to the reality of all existents, and secondly, to the reality of concrete individual existents. In the former case, the reality underlying existents is understood to mean essence. This clarification poses yet a further problem with regard to the translation of terms in the text in order that the terms correctly reflect the metaphysics of al-Abharī.

We are of course referring to another important term often repeated in the text of the *Hidāyah*, the term *māhiyyah*, literally to mean ‘the whatness’ of something. Obviously what is meant by ‘whatness’ is the same as what is meant by the term ‘essence’; therefore, we may ask: What is the difference between essence as denoted by the term *māhiyyah* and essence as denoted by the term *dhāt*? Since we are affirming that al-Abharī was of the Avicennan tradition, it is indeed valid to assume that clarification of such terms adheres to the same philosophical tradition, namely that *dhāt* is regarded as an ‘internal essence’ whereas *māhiyyah* is regarded as an ‘external essence’.²

Professor Morewedge’s brief explanation with regard to the meanings of internal and external essence is too truncated to assume clarification; he confirms that Ibn Sīnā himself did not distinguish between them, and then presents the arguments of Descartes in order to clarify the aforementioned terms. We know that the term *māhiyyah* was translated into Latin and expressed as *quidditas*, yet nowhere in the commentary of *The Metaphysica of Ibn Sīnā* do we find reference to the term ‘quiddity’ to reflect Descartes’ understanding of the distinction between internal and external essences. In our view therefore, and by virtue of the current text under scrutiny, we feel that the example shown by Professor Morewedge is too simplified and does not reflect the distinction accurately. The *Hidāyah* employs the term *māhiyyah* in the same manner as to Ibn Sīnā, but we have, in addition to translating the term to mean ‘essence’, rendered the term to mean ‘quiddity’.

Al-Abharī does not make any explicit distinction between *māhiyyah* and *dhāt* as the text will show. Are we to assume then that there is no distinction between essence and quiddity? The true answer would be that the ‘whatness’ of a thing is quiddity; essence is

² See *The Metaphysica of Avicenna*, 170.

“existence plus quiddity”.³ When a concrete existent is perceived, the mind seeks to identify and define the said object of perception. In doing so, it forms an association between the object of perception and a denotative word which represents the *definiens* (*al-mu‘arrif*). By virtue of the *definiens*, that which is perceived may be correctly identified in answer to the question “what is it?” posited by the mind. Professor al-Attas explains:

Our notion of a thing as it is immediately perceived - in this case a man, for example - is simply that of a real, concrete existent (*mawjūd*) having a particular individuality to which a word - for example, ‘man’ - is applied to denote it, and which word when mentioned will bring to mind the object which it denotes. This, in brief, describes our primary notion of a thing, a physical object of the senses. The mind, when contemplating the thing which demands its definition, and in answer to its own inner question about the thing: “What is it?”, proceeds to analyze it; to judge, discriminate, clarify and classify it until it arrives at a definition of the thing, that is, ‘rational animal’ in the case of ‘man’. In this concept-forming process the mind is able to abstract the thing’s ‘whatness’ from its existence, existence here being considered as something which is attributed to the thing itself, as if it were a property of the thing that is superadded to it. This ‘whatness’ is quiddity (*māhiyyah*).⁴

From the preceding quotation we are able to deduce that quiddity, defined in answer to the question “what is it?” with respect to objects of perception, is understood in the logical sense by virtue of the fact that we are mentally abstracting two derivative concepts, ‘man’, and ‘rational animal’. In doing so we are simply making a distinction between genus and species without any reference to a particular, individual existent. This does not mean however, that understanding the nature of quiddity is limited to the logical sense. Indeed, quiddity may also be considered ontologically, “understood to be ‘that by

³ *Prolegomena*, 236.

⁴ *Ibid.*, 218-219.

which a thing is what it is'⁵, in other words, that which qualifies a particular existent's being⁶. It is this thing which qualifies being that is the source of controversy between the essentialists and the existentialists.

Aristotle believed substances to be separate not only from matter but also from one another; each was self-sufficient and unrelated, and therefore was not subject to any single efficient cause. Indeed he believed that the unity of a thing and its being were identical, and that there was no question of looking for a source of unity other than being.⁷ Ibn Sīnā, on the other hand, made the distinction between phenomenological existents and their being, or more precisely, their essences. This distinction, Ibn Sīnā argued, manifests itself in two instances. The first is when things are considered in relation to their concrete phenomenological existence. The other is when things are considered in relation to their mental existence. Neither instance belongs to an existent all its own. If either type of existence were to belong to an existent all its own, it would inevitably be found in all existents wherever they were. The same is also true, with regard to unity and multiplicity. Thus a sensible existent in itself has a being of its own, and that being is the thing's reality, one that of itself is neither one or many, nor more manifest in the mind than in reality. Indeed, according to Ibn Sīnā, a thing's existence is not a result of its own nature, but rather an effect of a cause. This cause is ultimately God, the Necessary Existent.

⁵ Ibid., 221.

⁶ With regard to the various interpretations of a term in Arabic, Professor Morewedge has indicated that he does not "by any means, infer that Arabic is a weak language in which certain ideas cannot be expressed; we assume that it is self-evident (from the wealth of Arabic literature) that whatever can be expressed in Greek or Persian can also be expressed in Arabic by means of manipulating words and their positions, and by inventing new terms. When this is carried out however, the numerous resulting shades of meaning encourage many interpretations of a particular passage. While this inherent ambiguity might well be an asset to the poet, it poses many difficulties to the philosopher who must formulate his doctrines with the greatest possible preciseness". See *The Metaphysics of Avicenna*, 173-174. We have indicated that the Islamic sciences grew out of Qur'anic wisdom or *hikmah*, hence the title of the text at hand. We have further indicated that in order for any science to be termed 'Islamic' requires that it must first undergo a process of *islamization* as defined by Professor al-Attas in *Islam and Secularism*. The Muslim philosopher did not have to struggle to invent a term to *correspond* to either Greek or Persian, his task was to invent a *new* term reflecting an opinion which corresponded to the worldview of Islām. Later on Greek and Persian ideas were interpreted, by virtue of these *new* ideas forwarded by Muslim philosophers, but recognition for these ideas were misdirected and erroneously ascribed to a foreign source.

Therefore, in contrast with the Aristotelian conception of the One, the Avicennan Necessary Existent is not completely separate from being and ultimately the phenomenological world.⁸

When one discusses the foundations for al-Abhari's metaphysical thought, emphasis on the role of Ibn Sīnā is unavoidable. Therefore, we discuss here in brief the currents of Ibn Sīnā's metaphysical thought. Ibn Sīnā maintained that the immediate objects of intellectual cognition were not phenomenological concrete existents. For him, there was a distinct ontological order between (a) the logically categorized objects of intellection, (b) the forms in the intellect which have a distinct ontological status, and (c) the objects of the real world. Hence, even though the logically categorized objects of intellection arose by virtue of the forms in the intellect having a distinct ontological status, they were nevertheless distinct from both the latter and from the phenomenological objects of perception. With regard to the objects of intellection, their logical categorization is not representative of any eternal ontological truth. The world is the way it is not because of an inner code of essences but rather a contingent product of God's providence. Therefore, logical categorization is by virtue of a contingency, a mental effort to understand the world. From this perspective one may ask, how did the existent forms in the logical or phenomenological world occur? The answer is that because God is the Cause of causes (*al-'illah al-'ilal*), the continued existence of forms in the logical or phenomenological world in a prescribed manner and defined order is therefore, not essentially necessary, rather it is causally necessary.

The divisions of being represent the foundations for al-Abhari's ontological approach to metaphysics. We have already understood that the concept of being taken in

⁷ See Christopher Kirwan, *Aristotle Metaphysics*, (Oxford: Clarendon Press, 1993), 82-83

⁸ One may indeed venture to say that perhaps it was precisely this contrasting distinction that would later serve as the foundation for Descartes' celebrated maxim *cogito ergo sum*.

the physical context is based primarily on the notion of “thinghood”. How is this notion understood ontologically in the metaphysical context? The notion of being understood in the physical context refers to concrete corporeal entities. In the metaphysical context however, as we have mentioned, being refers to a purely mental abstraction referring to the reality of all existents, and to the reality of concrete individual existents. In other words, being refers to both concrete corporeal entities and to that which is distinct from existence in meaning and designation. We say therefore, with regard to the former, that in addition to its conceptual understanding, there must also be an understanding of it corresponding to reality; whereas with regard to the latter assertion concerning being, it is the most general notion which can neither be receptive of definition nor description. This is what is then understood as the ontological approach. In order to determine to which category al-Abhari understands being to be, we are thus obliged to refer to the essence-existence controversy.⁹ In general, we may determine from our understanding of al-Abhari’s cosmological conception of being that he is an essentialist. We are able to draw this conclusion from his adherence to an emanationist theory of creation. Such a belief necessitates a preference for essence over existence. Indeed, an emanationist theory which postulates primary matter and form as the basic constituents of being, necessarily posit existence as being most common to all beings and therefore, cannot be more than the reality of a secondary intelligible to which nothing in concrete reality corresponds. In addition, we have briefly alluded to the fact that the *mashshā’i* philosophers employed Aristotelian forms of syllogism in their arguments concerning being; such constructs

⁹ While Ibn Sīnā is generally regarded as being the philosopher responsible for making the distinction between essence and existence, the question regarding which of the two actually constituted the reality of a thing was not raised. It was only later toward the middle of the twelfth century that a clear, systematic distinction examining the primacy of one over the other with respect to the reality of a thing was conceived. This systematic distinction was first introduced by the illuminationist philosopher al-Suhrawardī. It was he who posited existence of being limited to the realm of mental abstraction, which did not correspond to anything in reality, for if, according to him, existence was indeed the primary reality for an existent, it would invariably require another cause for its existence. This cause would first have to exist which in turn would need another cause *ad infinitum*. See Alparslan Açıkgöç, *Being and Existence in Sadra and Heidegger: A Comparative Ontology*, (Kuala Lumpur: International Institute of Islamic Thought and Civilization, 1993), 46.

consider existence to be a property attributed to corporeal forms, and therefore existence is accidental to essence. Therefore, the real nature of existence, cannot be conceived. Consider the arguments of the philosophers:

All notions arising from mental conceptions are fully understood by the mind
The mind preserves essences

∴ All notions arising from mental conceptions are understood and preserved as essences

or;

If all notions arising from mental conceptions are understood and preserved as essences, then the nature of existence is extramental

But all notions arising from mental conceptions are understood and preserved as essences

∴ The nature of existence is extramental

From these two syllogisms a third syllogism may be constructed:

The nature of existence is extramental

That which is extramental cannot be conceptually known by the mind as corresponding to anything in reality

∴ The nature of existence cannot be conceptually known by the mind as corresponding to anything in reality

According to the conclusions drawn from the above mentioned syllogisms, existence is known only as an abstract concept to which nothing in reality corresponds. For this reason, existence is referred to as being a secondary intelligible. Existence, when referred to as a secondary intelligible, is an abstract notion which cannot verify the Reality of existence. As we have shown, this is because if one were to construct a proposition employing the Aristotelian logical method, the proposition would read; existence exists. However, logically speaking, this is not possible because existence would then be that which is predicated of a thing in existence and hence, some sort of attribute, property, or an essence. This being the case, existence is treated as a genus, which would then imply

that existence is something attributed to an essence. Indeed, this would imply that essence is prior to existence. Therefore, in order for essences to be, there must be a kind of existence prior to the existence of the essence. However, since existence is understood as a general notion it is devoid of any individuality and therefore, the kind of prior existence is not immediately understood. As a consequence therefore, essences are implied as being devoid of individuality. For instance, the essences of Zayd, 'Umar, and al-Abharī are identical, namely that they are all identified by the same essence, that of "human-ness". Yet al-Abharī argues that it is their very existence which is common to each. So where is the distinction? In the aforementioned paragraphs we have already considered the distinction between essence and quiddity. In this argument therefore, what is being referred to as entities having the same essence of human-ness is in reality quiddity. In addition, we are faced with this problem: Is there a distinction between the essence of a thing in existence and the fact that the thing exists? The answer to this question is not explicitly stated; however, if we assume that al-Abharī adopts the views of his predecessors, Ibn Sīnā in particular, then the answer is negative. According to Ibn Sīnā's explanation of this problem,

If Zaid is not an entity in this world [i.e. if the name does not designate an existent], then we can assert that It is false that Zaid sees. For whoever does not exist does not see. However, it is incorrect to declare that Zaid is a non-observer [i.e. it is incorrect to assert an affirmative property about him] unless Zaid is in someplace [in this world].¹⁰

But existence understood in the preceding context, is purely a mental conception, and we have already considered the fact that there is a limit of truth for the objects of knowledge as perceived by the external senses and interpreted by the internal senses. The mind, when relying on the external senses, cannot perceive of existence being other than a property attributed to the objects it perceives; it cannot, based on the external senses,

conceive of existence as a pure concept inhering in the mind as one of the effects of the Reality of existence.¹¹ This reality is systematically unfolding itself according to a determined hierarchical order “from the less determinate to the more determinate”¹² culminating in its manifestation in corporeal forms. Understood in this context, a thing’s essence is its existence.

In considering existence by virtue of the external and internal senses, we are essentially postulating a condition between perceiver and the thing perceived, or more correctly a “necessary framework of the subject-object dichotomy”.¹³ Clearly, things receptive of perception by the external senses are not identical. Indeed, the faculties of the external senses, in perceiving concrete, corporeal forms refer these perceived forms to the inner faculties of the senses by virtue of which the thing perceived subsequently experiences varying degrees of abstraction. These varying degrees of abstraction are ultimately intended to convey meaning to the perceiver of the thing perceived. Since the objects of knowledge are potentially infinite, the meanings conveyed by those objects of knowledge must also be infinite. Yet this is not the case as the limits of truth for objects of knowledge are finite, and therefore, the meanings conveyed by these objects, in order for them to be true, are also finite and particular for each object of perception. It is only by virtue of the perceiver’s ability to attain to a higher degree of perception that the limits of truth may be perceived and hence, the true reality or realities of the objects of perception may be known.

The perceptive faculties of ordinary man are such that the perceived objects of knowledge are interpreted by the mind as being unique and have no connection to other objects of knowledge. It is precisely these limited faculties of man that allow for the

¹⁰ See the *Metaphysica of Avicenna*, 183.

¹¹ *Prolegomena*, 127.

¹² *Ibid.*

limits of truth for each object of knowledge to be known. If man were equipped with the sensitive faculties to perceive things as universals, the meaning of creation, with regard to the variety and multiplicity that point to a Creator, would be redundant for God as Creator would be known.

The mind, in trying to comprehend the variety and multiplicity with reference to the phenomenological world and its relation to God, perceives this reality of multiplicity as the only reality *separate* from God.¹⁴ This distinction however, only exists in the mind. It is the very nature of perception to conceive things as particulars, only then can reason allow for inferences to be made with regard to universals. The very nature of this condition of making a separation between God and the phenomenological world, is a condition of "first separation".¹⁵ The common mind perceives the world of multiplicity in all its various forms as the sole reality; for the mind, the dualistic view of reality, in other words the apparent separation between God and the phenomenological world, is real.¹⁶ The essentialist philosopher in particular also perceives this dualistic view of reality, ascribing to the variegated multiplicity of concrete existents that confronts the senses, essences, "conceived ontologically as real substance".¹⁷ Al-Attas elucidates this point summarizing that according to the philosophers,

existences differ from one another essentially, each being an independent entity. They are dissimilar realities (*ḥaqā'iq mukhtalifah*) existing in the external world independent of the mind, and which the mind posits as portions of the general, abstract concept of existence due to its being rationally multiplied and divided as such (*i.e.* as portions) solely because of

¹³ Ibid., 178.

¹⁴ Ibid., 180-181.

¹⁵ Ibid.

¹⁶ Ibid. Prof. al-Attas explains that "the view of man at the physical, or everyday, ordinary level of reason and sense experience, in which things that make up the world of multiplicity take their concrete, separate forms and identities, is the view of the generality of the people (*'awāmm*) They see only the reality of the multiplicity before them, and nothing beyond that"

¹⁷ Ibid.

their being ascribed to the quiddities which are their substrata. In reality, then, the portions of existence are superadded in the mind to the existences with dissimilar realities and are therefore external to them.¹⁸

Clearly therefore, these essences ascribed to the multiplicity of concrete existents alluded to earlier, are imagined to endure necessarily in substances which become manifest by virtue of existence, as if an essence were the cause of a thing's existence. We say *these essences are imagined* to show that their conception is mentally predicated and are therefore, *logical* essences. Earlier, we have considered that al-Abhari employs the term *māhiyyah* to signify 'essence'. We have also shown that al-Attas has demonstrated that the term *māhiyyah* understood to mean 'quiddity' is not synonymous with 'essence'; the former refers only to "that which makes things to be different from one another, or to their differentia",¹⁹ whereas in the case of the latter, "it includes not only the difference but the substance of a thing".²⁰ Understood in this context then, how is it possible that essence be prior to existence? In the aforementioned paragraphs, we have alluded to the fact that the essentialist philosophers posit essence as being prior to existence. They further assume that existence is a more general concept. This being the case, how is it ontologically possible for the more general to be posterior to the more particular? Although it is logically possible, we have shown that in terms of the primacy of reality it is ontologically impossible for the more particular to be prior to the more general, and this is where the essentialist philosopher contradicts himself.

The process of creation or bringing into existence and annihilation or returning to non-existence, and recreation of similars is a dynamic existential movement. There is a principle of unity and a principle of diversity in creation. Al-Attas explains:

¹⁸ Ibid., 298-299.

¹⁹ Ibid., 236

²⁰ Ibid.

The multiplicity of existents that results is not in the one reality of existence, but in the manifold aspects of the recipients of existence in the various degrees, each according to its strength or weakness, perfection or imperfection, and priority or posteriority. Thus the multiplicity of existents does not impair the unity of existence, for each existent is a mode of existence and does not have a separate ontological status.²¹

Al-Attas further clarifies that the Essence of God is absolutely transcendent and is unknown and unknowable, except to Himself, whereas the essence or reality of a thing consists of a mode of existence providing the permanent aspect of the thing, and its quiddity, endowing it with its changing qualities. Al-Attas maintains that reality is at once both permanence *and* change, not in the sense that change is permanent, but in the sense that there is something permanent whereby change occurs. Change does not occur at the level of phenomenal things, for they are ever-perishing, but at the level of their realities which contain within themselves all their future states.

Al-Abharī begins his analysis on the divisions of being by delving into the realm of universals and particulars. It is noteworthy to mention that unlike Ibn Sīnā, who first embarks on a discussion concerning substance, al-Abharī chooses to discuss a subject which only serves to intensify the problem concerning being, as it directly relates to the relevance of his doctrinal adherence to essence as the true reality. In this chapter, al-Abharī's tendency towards an essentialist framework is implicitly mentioned. An essence, considered in itself, is neither universal nor particular. The formulation of this idea is borrowed from Ibn Sīnā; later, this concept was adopted by Mullā Ṣadrā in the formulation of his existentialist philosophy.²² An essence, when considered a particular, exists as long as the particular existent exists. In this manner, an essence may only be considered a universal in terms of a cumulative aggregation of particulars whose relation

²¹ Ibid , 245.

²² See Fazlur Rahman, *The Philosophy of Mullā Ṣadrā* (Albany: State University of New York Press, 1975), 45.

to each other is as individual essences. In other words, each individual essence whose manifestation is by virtue of a particular existent is considered together with the essences of other particular existents; the collective sum of these essences is referred to as being a universal. The great commentator of the *Hidāyah*, Mullā Ṣadrā, explains that:

Since an essence is not by itself a universal, in one sense it is “a nature spread out among particulars” and, so long as one particular exists, this essence will exist for “its relation to different particulars is not like the relation of a single father to different children, but rather like the relationship of different fathers to different children,” i.e. a one-one relationship. At this level it is called “a natural universal” (*kullī ṭabī‘ī*).²³

In keeping with the style and brevity of his composition, al-Abharī is not as detailed as Ibn Sīnā or even Mullā Ṣadrā. He does not point to the natural universal unlike Ibn Sīnā, hence we are neither aware of the natural universal nor of the possibility of a universal applied to refer to one of several denotations. Mullā Ṣadrā, on the other hand, considers a universal in two aspects; the first one we have already alluded to in the preceding quotation. However, as far as the natural universal is concerned, it does not exist as such in reality since we have considered it to be a cumulative aggregation of particulars. The meaning of a universal which al-Abharī refers to comes to exist as “an intelligible meaning in the soul”. What is meant is that a universal is perceived by the mind which affirms its existence as corresponding in a general manner to things in external reality. Al-Abharī continues his discussion by asserting that if this intelligible meaning in the soul which is referred to as a universal were to exist in a concrete thing, then that meaning would refer to that thing. It is not clear what al-Abharī intends to say. If we are to understand it literally, it appears as if a universal may be applied to a particular which is quite clearly absurd. How is it possible that a particular thing be a universal? Surely it is not only logically impossible but false to hold that “a single-individual

²³ Ibid.

universal should exist in the world independently of our minds and independently of things".²⁴ Therefore, we are assuming that al-Abharī must be referring to the fact that this intelligible meaning in the soul referred to as a universal is a unique *mode of existence* applicable to individual particulars. But then we would ask, what is it that makes it unique to a particular individual? It cannot be the essence of a thing because we have shown that an essence cannot be the principle of individuation or difference, priority then must be given to existence which is at once the principle of difference and the principle of unity. Indeed, existence is the Reality (*ḥaqīqah*) of every individual. According to al-Abharī though, existence cannot be the Reality of every individual because the individual is composed of both matter and form. Since the essentialist philosopher does not admit of existence as being the primary reality, but existence is admitted as an accident of the essence at once postulating essence as being the primary reality; Reality therefore, cannot be composed of matter and form.

When we speak of a condition of "first separation", in order for one to classify a condition as such, we are indeed assuming,

that there is a possibility for man- depending upon his intellectual level of development, his religious and spiritual state of affairs, and upon God's grace- to *transcend* it and then to *return* to it, so that for him his experience of the phenomenal world *after* his return to it would then become a condition of the 'second separation' (*al-farq al-thāni*)...This state of transcending the 'first separation' involves a transformation in the man, without which he would continue to be bound to the ordinary level of reason and experience in his existence.²⁵

It is obvious from the above cited quotation that not only is there the possibility of a further condition, but that there is also the possibility of a condition prior to the "first separation", namely to man's spiritual condition, "to his pre-existent soul *before* he

²⁴ See *The Metaphysica of Avicenna*, 180.

became man as human being. This condition of 'pre-separation'""²⁶ refers to the Covenant (*mīthāq*), a condition at which time;

the souls of mankind were made to 'witness' (*ashhada*) unto themselves the actuality of God's Lordship in the sense that they *actually know by direct experience and vision* (*shuhūd*) the Reality and Truth that is revealed to them.²⁷

Fortunately, and due to the fact that al-Abhari is an essentialist philosopher, he does not discuss existence either in terms of a second separation or of a pre-separation. However, in order for one to correctly conceive of the essence-existence controversy not merely from a logical perspective, it is necessary to discuss, however briefly, the ontological distinctions. At the beginning of this chapter, we have carefully outlined the differences with regard to the Arabic terms employed to convey truth. We are specifically referring to the terms employed to convey truth with regard to an existent and its reality. Earlier we have conveyed the fact that an existent entity may be both true and false. An utterance may be true when it is directed toward an existent corresponding to a fact. At the same time that existent may be false in reality, and we have cited the example of an idol. The Arabic terms used to convey this apparent contradiction are *ṣidq* in reference to truth with regard to utterances, and *ḥaqq* in reference to Reality and Truth. A derivation of the latter term appearing often in the philosophical texts of the Muslims is *ḥaqīqah*, most commonly used in metaphysical texts to mean reality.²⁸ With reference to this term, Professor Morewedge claims that:

Ordinarily *ḥaqīqah* is used in the following ways: (1) for 'essence' in the sense of *māhiyyah*; (2) for 'truth' in a sense similar to the way 'truth' is used in ordinary English with many vague shades of

²⁵ Ibid., 178.

²⁶ Ibid., 179.

²⁷ Ibid., 180.

²⁸ For the definition and meaning of the term *ḥaqq* as distinct from the meaning of *ḥaqīqah*, see *Prolegomena*, 131-132.

meaning; (3) for 'reality' in many different senses of the term, and (4) for 'God'.²⁹

Let us consider the merits of the preceding quotation, and try to draw parallels with the text of the *Hidāyah*. In the first instance, al-Abharī does indeed consider *ḥaqīqah* to be synonymous with essence but not in the sense of *māhiyyah*, but rather in the sense that it refers to the primary reality, which for him and other essentialist philosophers, is essence. As for the term used to mean God, it is our understanding that the term *al-Ḥaqq* is used to mean God. If in fact the term *ḥaqīqah* is employed, its usage is generally restricted to Ṣūfī mystical literature, *not* to mean God as such but rather to convey an aspect of His nature. In this sense therefore, it ultimately points to Reality. Hence, it would be erroneous to suspect that the term *ḥaqīqah* refers to God *per se*. As for the second meaning, namely that *ḥaqīqah* translates as 'truth' similar to the way it is used in ordinary English, one must be very careful to explain that in this sense, it refers to truth reflected by the term *ṣidq*. More importantly, truth refers to a corresponding fact in external reality (*al-wāqi'*). This brings us to the third classification where the term reflects 'reality'. Al-Abharī uses the term to mean 'reality' in the sense of phenomenological reality and not to mean 'Reality'. The meaning of the term understood in the former sense is clear from the text of the *Hidāyah*, Therefore, as far as the Arabic language is concerned unlike other languages, there are no *vague* shades of meaning. The richness of the language itself allows for the use of specifically defined terms to convey the intended meaning.

Returning now to the discussion concerning the conditions of separation, the condition of pre-separation refers to a spiritual condition prior to man becoming existent as such. This condition is rejected by the essentialist philosophers on account of their denial that the soul precedes the body. We will have the opportunity to discuss more on this matter in the section dealing with al-Abharī's eschatological philosophy. At the level

²⁹ See *The Metaphysica of Avicenna*, 170-171.

of the condition of second separation, the perceiver actually participates in comprehending,

that *that* by which things are what they really are, or the selves and realities of things which are their very existences, is no other than the all-encompassing reality of Existence actualizing Its multiple and diverse modes in a perpetual act of expansion and contraction in gradations from the levels of Its absoluteness to those of its manifold determinations till It reaches the realms of sense and sensible things.³⁰

Of course al-Abharī would not agree with the above mentioned condition. The “perpetual act of expansion and contraction” does not correspond to an emanationist theory as interpreted by Muslim masters. More importantly, the assertion that the “all-encompassing reality” is Existence is contrary to an emanationist theory of reality. For a theory of emanation assumes that Essence is the primary reality. The manifestation of this Essence in subsequent intellects, brought forth in gradation by necessity, becomes less determinate until it reaches the realm of the phenomenological world where Its manifestation is reduced to the mental realm. It would appear, if one were to agree with the theory of emanation, that which is referred to as Essence is *not* dynamic and thus clearly, no parallel may be drawn between the conception of reality as understood by al-Abharī, and the conception of reality as defined by al-Attas. Following the Şūfī’s, al-Attas explains that the “all-encompassing reality of Existence” is dynamic, and that It is in a constant state of Creating. This act of creation, as we have alluded to earlier, requires wisdom and will, and cannot be thought of as a certain “occasionalism” which still implies necessity, or more correctly, the absence of will.

Judging from the aforementioned arguments, the essentialist philosopher in general and al-Abharī in particular, conceives of reality from the point of view of an

³⁰ *Prolegomena*, 182.

elaborated condition of “first separation” alluded to in the preceding paragraphs. Starting from this basic view of first separation it is elaborated by the introduction of essence “conceived ontologically as real substance”³¹, and by the complex concatenation of Intellects as prescribed by the Avicennan theory of emanation. Al-Abharī considers the more salient features of this theory within the context of psychology of the Intellects, which as we have indicated, constitutes the third subdivision of metaphysics in the *Hidāyah*. Therefore, in keeping with the theme of the text, we do not intend to dwell on matters pertaining to this theory within the context of his ontology.

B. THEOLOGY

In this subsection, we are essentially interested in al-Abharī’s conception of God. Does he profess any originality in his metaphysical conception of God?, or does he adhere to the views of his predecessors, Ibn Sinā in particular? We find in support of the latter in answer to our question. In the opening chapter of the second science, al-Abharī presents proofs for the existence of God. The God that al-Abharī argues for is a Necessary Being, one that necessarily exists. Everything else apart from the Necessary Being is contingent, dependant upon the Necessary Being for their existence. His essence (*māhiyyah*) is His existence. By virtue of the fact that His essence is His existence, the essences of contingent beings precede their existence. We say contingent beings, because we have mentioned earlier the fact that only God is necessary, whereas all other beings are caused. He is absolutely simple and therefore has no other attributes apart from existence. Why must al-Abharī assume that the essences of contingent beings precede their existence? In the opening lines of the first chapter, al-Abharī defines the innermost reality of God, namely, that He must exist. In the definition al-Abharī employs the use of the two personal pronouns *huwa huwa*. The first case refers to His essence, whereas the

³¹ Ibid., 181.

second case refers to His existence. Similarly, with reference to that by which a thing is what it is (*mā bihi al-shay' huwa huwa*),

the two personal pronouns (*huwa huwa: it is it*) refer, in the first case, to an entity because of which the thing is that thing (*al-amr al-ladhī bi sababihi al-shay' dhālika al-shay'*), and in the second case, to an entity because of which the thing is that entity (*al-amr al-ladhī bi sababihi al-shay' huwa dhālika al-amr*), to its being itself in the first case, and to its being actualized in the second case. Its being actualized refers to its existence, which is common to all other existents; its being itself refers to its quiddity, which distinguishes it from all other existents.³²

Since we have mentioned earlier with regard to the conditions of separation, that the essentialist philosopher conceives Reality from the point of view of an elaborated condition of first separation, we understand from the aforementioned quote from al-Attas, that al-Abharī considers existence with regard to things as being additional to the essence, and therefore, posterior to their essences. This same principle, it would appear, applies to God even though His essence and His existence are to be found together. His essence is, for lack of a better word, the 'cause' of His existence. However, His existence in reality is a mentally superadded notion derived from "the general, abstract concept of existence".³³

A parallel may be drawn between the theology of al-Abharī and Ibn Sīnā. Ibn Sīnā explains that since neither genus nor differentia may be predicated of the Necessary Being, it is not receptive of either definition or demonstration. As such "neither its being nor its action can be an object of discursive thought, since it is without cause, quality, position or time".³⁴ All other beings do not exist necessarily or essentially, rather they are merely contingent beings. With regard to the question concerning God's attributes, al-Abharī's philosophy remains faithful to the Avicennan tradition. Indeed for al-Abharī,

³² Ibid , 231.

³³ Ibid., 299.

God is conceived as having no attributes. How can God be omniscient if He has no attributes? How then is al-Abharī's description compatible with God having knowledge of the world? After all the Qur'ān speaks of the fact that "Allah doth know (all) that is in the heavens and on earth",³⁵ "from Whom is not hidden the least little atom in the heavens or on earth",³⁶ "they (i.e. other gods) have no power, not the weight of an atom in the heavens or on earth",³⁷ and "O my son! (said Luqmān), if there be (but) the weight of a mustard seed and if it were (hidden) in a rock, or (anywhere) in the heavens or on earth. Allah will bring it forth: for Allah understands the finer mysteries, (and) is well acquainted (with them)."³⁸ Al-Abharī attempts to justify the difficulty of conceiving God as having no attributes by explaining that in knowing Himself, God is capable of knowing everything that emanated from Him. Since God is conceived without attributes, He cannot know particulars, but rather only the essences or universal principles. In this manner, He is said to know particulars in a universal way.

Al-Abharī further argues that while God only knows particulars in a universal manner, it does not prevent Him from knowing details of any given event. This is reflective of Ibn Sinā's conception concerning God's knowledge. Ibn Sinā proposed that, because God knows particulars in a universal way, "perceptual knowledge is superfluous for Him".³⁹

Since God is the emanative cause of all existents, He knows both these existents and the relations subsisting between them. God knows, for example, that after such a series of events a solar eclipse would occur, and knowing all the antecedents and consequences of this eclipse, He knows in a

³⁴ See *A History of Islamic Philosophy*, 153-154.

³⁵ 58/Al-Mujādilah, 7. Translation from Abdullah Yusuf Ali, *The Meaning of the Holy Qur'ān*, (Brentwood, Maryland: Amana Corporation, 1994).

³⁶ 34/Saba', 3.

³⁷ Ibid., 22.

³⁸ 31/Luqmān, 16.

³⁹ See M. M. Sharif, *A History of Muslim Philosophy*, (Delhi: Low price Publications, 1995), v.1, 502

determinate manner its qualities and properties; He knows, therefore, what this particular eclipse will be, and can differentiate it completely from all other events even of the same species, viz. eclipse in general. But when the particular eclipse actually occurs in time, God, not being subject to temporal change, cannot know it. But He also *need* not know it in this way, for He knows it already.⁴⁰

What this means is that in knowing all the antecedents and consequences in any given causal chain, God's knowledge of the particular is not precluded, since it allows for Him to know an event temporally and differentiate it from all other events. However, such a conception suggests that God does not act directly on a world of corruption and generation but rather through a series of intermediary causes. We have considered earlier the fact that al-Abhari's conception of God as Necessary Being is essentially an adoption of Ibn Sīnā's theory of essential necessary causation which makes the distinction between two necessary principles: the first one, that God is uncaused; and the second one, that all other existents are necessarily caused. Indeed, they are necessarily caused because that which is their cause is necessary, and that which is necessary must by definition produce the effect. This would mean that both cause and effect are simultaneous. Al-Abhari would have us believe that the priority of cause to effect is both logical and ontological. But then we would be justified in asking, how is the priority of cause to effect logical? The mind may conceive of a first being as the cause for all other beings. But when that first being is said to be necessary, the chain of events thought to proceed necessarily from the first being must be metaphorical. Even if one were to argue that, at the very least, the chain of events is imagined, one cannot imagine priority and posteriority as simultaneous because both events are opposed to each other and are, therefore, logically mutually exclusive. Hence, what this amounts to is a logical impossibility.⁴¹

⁴⁰ Ibid

⁴¹ Al-Kindī's thought, on the other hand, bears little resemblance to the aforementioned propositions concerning God as Necessary Being. We have duly considered the fact that al-Kindī did indeed share in an essentialist philosophy, one where the Plotinian theory of emanation gained some acceptance. However, al-Kindī did not consider God in terms of a Necessary Being, but rather as First True Cause.

Logic cannot exhaustively explain nor can the mind fully comprehend the manner in which God knows. However, the Arabic language is an aid to the intellect in the sense that it allows logic to proceed along a certain path in order that the meanings of certain terms becomes clear. What logic is concerned with, as we have noted in our commentary concerning logic, is conventional verbal denotation. The Arabic language, by virtue of a precise system of roots, allows the intellect to grasp a clear configuration of ideas through the apprehension of a single term. Take for instance the term '*alam*' rendered in English to mean universe. The root word is '*alima*', whence the term '*ilm*', meaning knowledge, is derived. So now the language, by virtue of a single term, allows the intellect to make the connection between the universe and knowledge. Yet one may argue that the connection between God, the universe and knowledge is not apparent. But one of the beautiful names of God is *al-ʿĀlim*, from whence both the term '*alam*' and '*ilm*' are derived. Therefore, now it is clear that by virtue of a single term, the intellect is able to grasp the fact that God (*al-ʿĀlim*) is connected to the world ('*alam*') which is a product of His knowledge ('*ilm*').⁴²

Another example is the term *khalaqa*, whose basic meaning is to give something its proper measure,⁴³ is generally translated to mean creation. By virtue of the fact that one of God's names is *al-Khāliq*, the intellect is able to associate the phenomenological world of creation with the Creator. In addition, the intellect is able to grasp the fact that the world of creation is not a haphazard chance event. We have already considered the fact that the basic meaning of the term *khalaqa* is to give something its proper measure; therefore, knowledge is implied. This implied knowledge is not the kind the essentialist

This First True Cause would be defined by al-Kindī as a creator (*mubdi'*) and mover. Creation was, for al-Kindī, the principle and only true action of God; true in the sense that it is performed without the intermediary of the causal chain, clearly a theory opposed to the later more prevalent views of Ibn Sīnā's and subsequently al-Abharī's theology.

⁴² The merits of this deductive argument was elucidated to me by Prof. al-Attas during our numerous discussions.

⁴³ See Ibn Manẓūr, *Lisān al-ʿArab*, (Beirut: Dār Ihyā' al-Turāth al-ʿArabī, 1996), v. 4, 193.

philosopher would have us believe, one where God is reduced to having knowledge of particulars yet in a universal manner. By virtue of the fact that the term *khalaqa* denotes the proper measure of a thing, God must not only have intimate direct knowledge of particulars, but He must also be dynamic. In addition, both *al-‘Ālim* and *al-Khāliq* point to two attributes of God.⁴⁴ Therefore, we say that God knows by virtue of His attribute of knowing, He creates by virtue of the attribute of creation, and so forth. Hence, it is clear that one cannot discount an idea without first directing one’s attention to the language itself. Al-Abharī was surely an accomplished linguist; this is evident from the ease at which he employs several terms synonymously, particularly in his treatment on logic. So, it appears somewhat out of character for him to have rejected outright the opinions of the theologians concerning God’s attributes.

Unlike the Judeo-Christian West in trying to prove the existence of God, Muslim philosophers were not compelled to directly address the problem of evil. In the context of Muslim thought, the existence of God was a prerequisite. In fact, the aim of the philosophers was to affirm the existence of God using Aristotelian logic. So we do not find al-Abharī, or any other Muslim philosopher arguing against the existence of God, on the contrary he attempts to affirm His existence from a philosophical perspective. A similar issue which al-Abharī attempts to explain concerns the unity of God. What was of paramount importance to al-Abharī’s predecessors from within both the schools of the philosophers and theologians was how to reconcile God’s absolute unity and perfection with the fact that imperfections at the phenomenological level exist. This apparent distinction gave rise to a God-His will dichotomy. We observe in the *Hidāyah* however, that al-Abharī does not argue this issue in the context of trying to prove the unity of God. Once again we are reminded that al-Abharī frequently employs a logical method of argumentation showing preference for premises constructed from the conjunctive

⁴⁴ Ibid. See also v. 9, 370.

conditional proposition. In proving God's unity, he argues for His omnipotence; no mention, neither implicit nor explicit, is made which would hint of the God-His will dichotomy. Only in the last chapter of the section on theology does al-Abhari consider the problem of God and His will. Again, we notice that the Muslim philosopher did not perceive a problem in trying to associate God with the world of phenomenological existents. But how is this possible? The only possible explanation comes from the ontological arguments concerning unity and plurality. In the aforementioned commentary concerned with al-Abhari's ontology, we have explained that according to him, when unity is predicated of a universal, it does not imply that it actually inheres in all particulars which partake of it. It is only potentially inherent. Therefore, while remaining numerically one, it is potentially many. This definition would suffice not only in addressing the so-called problem of how the many came from the One, but also in considering the God-His will dichotomy. In addition, also within the context of his ontology, al-Abhari draws the reader's attention to the multifarious conceptions of the one. In doing so, he implicitly outlines his intentions to define Necessary Existent according to the ontological conception of the one. Therefore, by virtue of the obscure distinction, al-Abhari, like so many of his predecessors, rejected creation by will, adopting instead existence by necessary emanation. If the essentialist philosopher were to adopt the process of creation, or bringing into existence and annihilation, or returning to non-existence and recreation of similars, their philosophy would have to admit that what we call creation is a dynamic existential movement. Their philosophical system however, advocates an unchangeable or static First Cause; it does not consider that in creation, there is a principle of unity and a principle of diversity, for:

The multiplicity of existents that results is not in the one reality of existence, but in the manifold aspects of the recipients of existence in the various degrees, each according to its strength or weakness, perfection

or imperfection, and priority or posteriority. Thus the multiplicity of existents does not impair the unity of existence, for each existent is a mode of existence and does not have a separate ontological status.⁴⁵

This clarification results in an understanding concerning the Essence of God; It is absolutely transcendent and is unknown and unknowable, except to Himself. On the other hand, the essence or reality of a thing consists of a mode of existence providing the permanent aspect of the thing and its quiddity, endowing it with its changing qualities.

We have already considered the fact that al-Abhari, like Ibn Sina, held that God is a necessary being, one whose only attribute is His existence, and that all other beings emanate from the divine, necessarily. In opposition to this, al-Ghazzālī argued that whatever proceeds from God by necessity denies God agency, namely it denies Him Free Will.⁴⁶ Since the philosophers have argued that He has no attributes save existence, God has no free choice to decide which world to create, and when to create it.⁴⁷ Ultimately, it is not incumbent for either the essentialist philosopher in particular, nor the Muslim in general to know God as He is in Himself, namely, in the Absolute sense. Knowledge, for the Muslim, means power. If one has knowledge concerning something, then one is said to have power over it. Having knowledge concerning God in the Absolute sense would suggest, by virtue of sound valid argument, that the possessor of that knowledge has power over God. Hence, the mere suggestion of an intimate knowledge concerning God in the Absolute sense is absurd, and we have illustrated this absurdity by clear logical principle. Knowledge concerning God and His knowledge is acquired from a revealed source in a limited form, limited because our capacity to know is limited. Therefore, by virtue of this human limitation, if God were to reveal His aspect as He is in the Absolute

⁴⁵ See *Prolegomena*, 245.

⁴⁶ See Sabih Ahmad Kamali, *Al-Ghazali's Tahafut al-Falasifah*, (Lahore: Pakistan Philosophical Congress, 1963), 64.

⁴⁷ There is no confusion on the part of the Muslim when we say *which world* to create. We are indeed considering the implication that there exists other worlds apart from the one we know through the

sense, it could not be understood. It would further imply an imperfection in God's omniscience. The task of Muslim philosophers, theologians, and ṣūfī's was not to know *what* God is but rather to know *who* He is. This Qur'anic approach with regard to comprehension concerning God is the reason why the Muslim philosophers in particular, and Muslim scholasticism in general was not directly effected by the problem of evil in creation, nor did they suffer from the free-will defense. In this connection, it would appear that al-Ghazzali's criticism of the philosophers with regard to their conception of God as necessary being can be equally applied to advocate the problem of evil which states that God by necessity must always act in a certain way that will ensure that the consequences of His actions are wholly good. This would then pick apart the dilemma posed by Western philosophy in trying to reconcile the divine attributes of omniscience, omnipotence, wholly good versus the reality of evil in the world, since now, God would not be obliged to abide by the condition of being wholly good. For al-Abhari, the adoption of an Avicennan theory of emanation avoids the problem of trying to account for the apparent imperfections of the phenomenological world, and it is precisely this formulation which acts as the foundation for al-Abhari's philosophical psychology of the Intellects.

C. PSYCHOLOGY OF THE INTELLECTS AND ESCHATOLOGY

Al-Abhari's psychology of the Intellects, comprising four brief chapters, represents by far the shortest subsection of the entire *Hidāyat al-Ḥikmah*. Yet it is within the context of psychology of the Intellects that the theory of emanation is bound, and whence al-Abhari's entire physical cosmology is derived. Once again al-Abhari's concise style so characteristic for the *Hidayah* is manifest, and we are left wondering if indeed we may derive any originality on his behalf. At this stage we are convinced of his adherence

sensitive faculties. We are simply interpreting the verses of the Qur'ān containing the words *Rabb al-*

to the Avicennan school of thought, so we do not expect to discover some train of philosophical thought beyond the scope of Avicennan scholarship. The scope of evidence pointing to an adoption, by the Muslim essentialist philosophers, of a Plotinian theory of emanation is well documented. In addition, voluminous works dedicated to the explication and clarification of ideas detailing the method and hierarchy of such an emanative scheme, from the transcendental to the subterranean world, have been pored over, examined and re-examined. Therefore, any attempt to re-word, re-write, or propose an addition to the already established data would appear not only redundant, but an exercise in verbosity and prolixity.

While much has been written with regard to the Muslim essentialist philosophers' adoption of a Plotinian theory of emanation, there are, as far as we are aware, no written sources indicating the reasons why such a theory was so readily adopted. After all, for the Muslim philosopher, did not such a conception appear to be radically at variance with the Qur'anic view? Does not such a conception appear incongruous with an omniscient and omnipresent God? But more importantly, is the Muslim philosophers' comprehension of the theory of emanation an unadulterated imitation of the Plotinian conception? Let us begin to answer these questions by briefly examining the Plotinian theory of emanation.

In both the *Theologia* and *De Causis*, "Plotinus' doctrine of the One and the manner in which it generates the whole order of being beneath it is set forth at length".⁴⁸ The First Cause, or the One, is the cause of all being and perfection, yet is removed or separate from being and perfection. Since being and perfection are its very nature, it would be logically absurd to assume that the One would be defective of that which is a complete effect that issues forth from it.

⁴⁷ *Ālāmīn* literally.

⁴⁸ See *A History of Islamic Philosophy*, 20.

The Perfect (*al-Tamm*), which is also the first being or essence, trains its gaze upon its author, is filled with light and beauty, and thereby becomes Reason. As a result, its actions have come to resemble those of the True One, from which it derived, and by which it was endowed with “great and numerous powers”, whereupon it produced the Soul, in a motionless manner, analogous to the manner in which the One produced Reason in the first place. The Soul however, being “the effect of an effect”, is unable to act without motion, the product of its action being an image, i.e., an entity “which is continually evanescent and is neither permanent or lasting,” as indeed are all the products of motion. This image is the world of Nature or sense.⁴⁹

Essentially, Perfection admires its own perfection and in doing so becomes the cause for Reason, which in turn, and by virtue of its intellection, gives rise to the Soul, which in turn is the cause for the world of Nature through the intermediaries of motion and its effect. What is interesting is the apparent contradictions in this otherwise convincing theory. To begin with, Plotinus admits that Reason, by virtue of it being derived from the True One, resembles its actions for it is “endowed with great and numerous powers”. Yet it is defective because in order for the world of Nature to spring forth it requires the Soul without which neither motion nor the world of forms, two necessary pre-requisites in the sensible world, would be possible. If the One were indeed the cause of Reason, and had Reason “endowed with great and numerous powers” resembling itself, then it must either have the same powers as Reason or even greater powers. The former supposition would suggest that the One is defective and is in need of something other than it in order that it acquire the possibility to be known. The something other than it would in turn require another something, and so on *ad infinitum*. Since Plotinus’ theory assumes that the Perfect, or the First Cause, or the One is a perfect being in itself, and because it is the cause of both being and perfection, it is not connected to that which emanates from it. If, as assumed, the One is perfect, how does Reason, which we have assumed to be deficient

⁴⁹ Ibid., 25.

emanate from it? The latter supposition then must be accepted as true. But if it were true that the One has even greater powers than Reason, why would it be in need of Reason in order that the world of Nature be known?

This was, for al-Kindī, perhaps his greatest difficulty in adopting the theory of emanation posed by the Greek masters. If indeed God is conceived as being omnipotent, omniscient, and omnipresent the need for an intercession mediating on behalf of God and creation becomes redundant. In the introduction we have briefly considered the fact that although al-Kindī partially adopted an emanationist philosophy, he is nonetheless more heavily influenced by Qur'anic philological interpretation. This is clearly evidenced by his preference for creation *ex-nihilo* as opposed to emanation. He employs the term *al-'ibdā'* to refer to creation, defining it as "the appearance of a thing from nothing".⁵⁰ Al-Kindī's choice of term, namely *'ibdā'*, is indicative of the fact that he considers creation to be the primary action befitting of God alone. Again the connection between the verbal noun as definition and the act, is couched in the root word *bada'a*, generally understood to mean 'to originate'. More importantly however, the term *ibdā'* signifies an attribute, that of fashioning or shaping. In this sense, it bears some similarity with the term *khalāqa*. We have indicated earlier, that the latter means "giving a thing its proper measure", and hence, intimate knowledge of particulars becomes a prerequisite. Therefore, we may conclude that while al-Kindī is widely reported to have accepted an emanationist view concerning creation, his views in this regard are more aligned with the Qur'anic interpretation. Proof of this is derived from al-Kindī's own writings.⁵¹

⁵⁰ See Tamar Zahava Frank, *Al-Kindī's Book of Definitions: Its Place in Arabic Definitions Literature*, (A PhD dissertation presented to the Faculty of the Graduate School of Yale University, December 1975), 45. The Arabic translation offered by Frank reads, "making a thing appear from nothing". I have opted instead for my own translation although strictly speaking *'idhhār* should be translated as "the coming into being", or "the being brought forth".

⁵¹ See al-Kindī's "Risālah al-Kindī fī kammiyyah kutub Aristūṭālīs wa mā yahtāju 'ilayhī fī taḥṣīl al-falsafah", *Rasā'il al-Kindī al-Falsafīyah*, Muḥammad 'Abd al-Hādī Abū Rīdah ed. (Cairo. Dār al-Fikr al-'Arabī, 1950), 363-384. Here al-Kindī discusses 36/Yāsīn verses 78-82, in which the arguments he defends concerning creation are philologically rooted.

In addition, we have previously considered the fact that al-Kindī refers to God as First Cause or *al-Mubdi'*,⁵² signifying creator and mover. In connection with this, al-Kindī states that:

“The first true act [of creation] is the bringing into being of beings from [a condition of] non-being. This act is clearly proper to God, who is the end of all causes. Verily, the [act of] bringing into being of beings from [the condition of] non-being does not [belong] to anyone other than Him. This act is specially [designated] by the term ‘creation’ (*al-ibdā'*)”.⁵³

It is interesting to note that the term al-Kindī employs to signify bringing into being is *ta'yīs*, the verbal noun derived from the root *aysa*. According to Ibn Manẓūr, the term is very specific in that it may only be employed to denote a state of being and existence (*wujūd*).⁵⁴ This fact further enhances our argument concerning al-Kindī's adherence to a Qur'anic interpretation of creation.

So why did the Muslim essentialist philosophers adopt the theory of emanation? In order to answer this question, we need to examine the fundamental premises of the theory as conceived by Muslim essentialist philosophers, al-Abharī in particular, and try to find a possible explanation from a historical source. The fundamental premise of al-Abharī's psychology of the Intellects is that the ultimate cause of existence is God's intellection. The object of God's intellection is God Himself. The first intellect by virtue of intellection exhibits two aspects. First, by virtue of its intellection of the Divine Essence, the second intellect is brought forth; second, by virtue of its intellection of itself, the Soul of the highest celestial sphere is brought forth. In a similar fashion, the second intellect, by virtue of its intellection of its cause, namely the first intellect, and of itself,

⁵² See M. M. Sharif, *A History of Muslim Philosophy*, (Delhi: Low price Publications, 1995), v.1, 502.

⁵³ See al-Kindī's, "Risālah al-Kindī fi'l fā'il al-Ḥaqq al-Awwal al-Tāmm wa'l fā'il al-Nāqis alladhī huwa bi'l Majāz", *Rasā'il al-Kindī al-Falsafiyyah* 182-183. Translation my own.

⁵⁴ See *Lisān al-'Arab*, v. 1, 288.

the third intellect is brought forth along with the Soul of the next celestial sphere respectively. This process continues in descending hierarchical order until the ninth celestial sphere and the tenth or Active intellect is brought forth. At this point the celestial structure of creation ends and the elemental order begins. Such a scheme, al-Abhari believed, is a tenacious attempt to preserve the unity or oneness of God which, for the Muslim philosopher, represents the embodiment of the Qur'anic concept of *tawhīd*. In the construction of his scheme, which is borrowed from Ibn Sīnā, al-Abhari does not allow for multiplicity to emanate from God. Multiplicity is generated from the first intellect. This is possible by virtue of the fact that the first intellect is a contingent being. When the first intellect contemplates the Divine Essence, another intellect totally separate from matter is brought forth. Only when the first intellect contemplates itself, it becomes connected with matter by virtue of the resultant Soul. In this manner, al-Abhari believed that a balance between God's transcendence and His immanence is achieved.

However, the theory of emanation posited by al-Abhari not only clearly denies God even the possibility of having intimate knowledge of particulars, it also implies a certain redundancy to His dynamic nature. We have considered the fact that according to al-Abhari's scheme, God can only be connected to the first intellect, He cannot be connected to the first Soul due to the fact that it is connected to matter. Hence, the explicit mention of an intermediary between God and matter or the created world, is unavoidable. Therefore, we are still left with this unanswered question: Why did the Muslim essentialist philosophers adopt such a theory which clearly caused them to be at risk of being accused of heresy?⁵⁵

⁵⁵ We are referring to the famous incriminating arguments made by al-Ghazzālī in his *Tahāfut al-Falāsifah*.

Recall the sacred tradition: "I was a Hidden Treasure and I loved to be known, so I created the Creation that I might be known".⁵⁶ Although this sacred tradition was well known among the *ṣūfī*'s, it is very plausible that it was equally known among the philosophers. After all, Ibn Sīnā himself quotes from a sacred tradition in connection with the soul.⁵⁷ It is our contention that the theory of emanation closely resembles the interpretation of the "Hidden Treasure" sacred tradition. Recall that the theory of emanation assumes a certain love of Oneself. When Perfection gazed upon Its own perfection, another being, the first intellect was brought forth. The gazing upon Its own perfection is the implication of love for Oneself. Al-Attas explains,

the 'loving to be known' already implies a disposition pointing towards His self-revealing aspect. In this aspect He is already swayed, as it were, by love (*ḥubb*), which is the principle of ontological movement that becomes manifest in creation.

It is possible therefore, to draw a parallel between the unfolding ordered hierarchical spheres through emanation, and the manifestation of creation by love as explained in the above quotation. Fakhr al-Dīn al-Rāzī reports that this particular sacred tradition was narrated by the Prophet Muḥammad (p.b.u.h), in connection with the miracle of creation. So it is possible that due to the fact that it was narrated by the Prophet, when the Muslim philosophers came across the *Theologia* and *De Causis* which the translators had mistakenly ascribed to Aristotle, whom the philosophers greatly admired, they adopted the theory of emanation because it rationally explained what the Prophet had narrated. Each school of thought, namely the philosophers, theologians, and

⁵⁶ See *Prolegomena*. See also Fakhr al-Dīn al-Rāzī, *Al-Tafsīr al-Kabīr*, (Beirut: Dār al-Kutub al-‘Ilmiyyah, 1990), 200. Al-Rāzī quotes the same sacred tradition but with a slight variation. He writes: "The Prophet (p.b u h) said that, He (God) says I was a hidden treasure and I wanted (*‘aradtū*) to be known, so I created the Creation." The variation is slight, however, for the purpose of constructing a possible link between the sacred tradition of the Hidden Treasure and the possible reason for the acceptance of the theory of emanation by the essentialist philosophers in particular, we have shown preference for the term 'loved' (*aḥbabtu*) instead of 'wanted'. Furthermore, this sacred tradition was well known and therefore the slight variation alters neither the meaning nor the interpretation.

⁵⁷ The sacred tradition we are referring to is "He who knows himself knows his Lord", or *man ‘arafa nafsahu faqad ‘arafa rabbahu*.

the ṣūfī's were familiar with each others ideas, in other words, they were not working in a vacuum. Therefore it is quite possible to assume that the philosophers were aware of this tradition through the works of the ṣūfī's and could have quite possibly adopted the sacred tradition of the "Hidden Treasure" interpreted within the confines of reason.

We infer from al-Abhari's psychology of the Intellects that the first kind of contingent beings are intellects and angelic beings. We noted earlier that it was intellection that generated being and substance, following an ordered hierarchy from intellect to intellect down to the tenth intellect, the Active Intellect (*al-'aql al-fa'āl*). The theory of Active Intellect is essentially an Islamic innovation in a Neoplatonic mode. The Active Intellect, according to al-Abhari is an intermediary between the celestial world above the moon and the human soul. In this manner, the human soul is linked to the One. The human mind receives intelligible forms by virtue of an abstraction of the material forms perceived by the sensible faculties. These intelligible forms are then stored in the Active Intellect, which, according to Ibn Sīnā, "overflows with the appropriate forms as soon as the Soul has become prepared for their reception"⁵⁸ through the process of emanation. Al-Abhari, unlike Ibn Sīnā does not elaborate on how this process is initiated in man. We recall that Ibn Sīnā differentiates between the material and habitual intellect, the latter having "attained the stage of partial actualization at the behest of the Soul as it turns toward the "source of illumination" (*ishrāq*), or active intellect".⁵⁹ At this point, the Soul, having descended to the world of multiplicity and corruption ascends to unity. Therefore, the Active Intellect, having itself emanated from the One, serves only as a causal link between the world of multiplicity and the One.

Yet the problem of how multiplicity is generated from the One persists. Al-Abhari frequently mentions that because the First Principle is simple, only one can emanate from

⁵⁸ See *A History of Islamic Philosophy*, 162.

Him. We will be compelled to argue this point further when we discuss the eschatological conception on the fate of the soul. The theory of emanation does not answer this question. If the principle that only one can effect from the One were to be applied in answer to the problem of multiplicity from unity, would not the first contingent being, namely the first intellect, also be simple? How does multiplicity become possible in it, since the One, by virtue of the principle of absolute simplicity, cannot be conceived of having the possibility of multiplicity? The solution to this problem for al-Abharī remains unanswered. In contrast,

the metaphysicians, however, since they affirm the sole reality of existence, say that the single first effect from the One which is the Absolute Existence is general existence (*al-wujūd al-'āmm*) which, as the unfolded existence (*al-wujūd al-munbasit*), expands as a result of God's self-contemplation in the first degree of existence to the level of the first determination (*al-ta'ayyun al-awwal*).⁶⁰

In short, from the One, general existence is brought forth within which is effected the rise of attributes and essences already containing a myriad of multiple possibilities as modes of existence. The Essence of the One remains on the one hand dynamic and intimately connected with creation, yet preserved in unity. The process of expansion, through the mediacy of these attributes and essences, gives rise to other essences and modes of unfolding existence terminating at the level of sense perception, when actualized existence becomes manifest in the multiplicity of existents.⁶¹ In this manner, the metaphysicians managed to connect God with creation without predicating contingency of Him.

Al-Abharī's eschatological conception, as we have noted earlier, is comprised in his concluding remarks. We will limit our discussion to his conception with regard to the

⁵⁹ Ibid.

⁶⁰ See *Prolegomena*, 315.

fate of the soul. Earlier we have mentioned the problem that from the One only one can proceed. Al-Abhari mentions that the soul cannot precede the body for if that were true "it would be an agent prior to the existence of the body"⁶² which, according to him, is impossible. He goes on to clarify that "the soul is that which acts by means of bodies".⁶³ Recall the theory of emanation, one may conclude that somehow there is an idea of a universal Soul. In other words the Soul is conceived as being a general concept that somehow descends to the world of multiplicity and corruption, and then re-ascends to unity. Without close scrutiny, it would appear that al-Abhari is arguing that the universal Soul which is one and simple, somehow gives rise to an individual soul which then attaches itself to a body after the creation of that body. Later when the body becomes corrupted and dies, the individual soul returns to the universal Soul and once again assumes its undifferentiated nature. For al-Abhari, like Ibn Sīnā, there cannot be many different souls by virtue of the fact that the soul is a spiritual entity and as such cannot be divided.⁶⁴ We are reminded that division only occurs through things composed of both form and matter. Hence, there is only one Soul but this one-ness refers to the essence, which is the same in every individual soul. Ibn Sīnā argues this point asserting that all human souls are necessarily of the same species and concept.⁶⁵ One-ness therefore, does not refer to its existence since clearly this would lead to contradiction. We have explained that an essence, in contrast to existence, cannot be both the principle of difference and the principle of unity. An essence can only be the principle of difference. If we are to understand that there is only one soul, and this one-ness is understood to mean in terms of

⁶¹ Ibid., 316.

⁶² See chapter one of the third science.

⁶³ Ibid.

⁶⁴ See Fazlur Rahman, *Avicenna's Psychology*, (Westport, Connecticut: Hyperion Press Inc., 1981), 62. Ibn Sīnā, arguing from the point of view that the soul is incorruptible, affirms that the soul is absolutely simple. This is completely in conformity with the principle that from the One only one may result. He argues that since the soul is not a composite of matter and form it cannot be corruptible, for corruption is predicated of composite things.

⁶⁵ Ibid, 56. Refer also to where Ibn Sīnā considers that the soul is a single substance having different faculties, 64.

its essence, as both Ibn Sīnā and al-Abharī argue, and that this one soul is the progenitor to individual souls existing in man, what is being asserted is that an essence can be both the principle of difference and the principle of unity. This argument from the point of view of logical analysis is clearly contradictory. Al-Abharī asserts that “every body is suited to be attached to a soul”.⁶⁶ In essence he reaffirms the position of Ibn Sīnā who tries to show that “the soul comes into existence whenever a body does so fit to be used by it”.⁶⁷ But in trying to show that the body pre-exists the soul Ibn Sīnā argues that the souls of man cannot have one essence, a position opposed to the one earlier. However, his opinion, correctly understood, implies that there is no difference in the Soul before it becomes part of the body. When it becomes attached to the body, it cannot be one; it must be different.⁶⁸ There seems to be something missing from the explanation. By virtue of his explanation, there must be an intermediary, from unity to diversity otherwise the argument does not explain how the one becomes the many. This intermediary cannot be substantive for obvious reasons, so Ibn Sīnā designates a quality, a “natural yearning” to occupy itself with a particular body.⁶⁹

We have already mentioned the fact that al-Abharī speaks of the fact that “every body is suited to be attached to a soul”. For a body to be “suited to be attached to a soul” implies that the soul must exist prior to the body. The Qur’ān speaks of Allah as “the Creator, the Evolver, the Bestower of forms”.⁷⁰ What we are interested in is the term used for the Bestower of forms, *al-Muṣawwir*. The term *ṣawwara*, “implies giving definite form or color so as to make a thing exactly suited to a given end or object”.⁷¹ This would imply that the end, or object must already exist prior to it being given a defined form or

⁶⁶ See conclusion.

⁶⁷ *Avicenna’s Psychology*, 57

⁶⁸ *Ibid*

⁶⁹ *Ibid*.

⁷⁰ 59/Al-Hashr, 24 Translation from *The Meaning of the Holy Qur’ān*.

⁷¹ See *The meaning of the Holy Qur’ān*, footnote 5406.

color. The term al-Abharī employs is *ṣāliḥ* which we have translated to mean 'suited'. Derived from the verb *ṣalaḥa* the term implies a fashioning, a fitting, a certain appropriation. In order for something to be fitted to something else, the latter, in this case the soul, must exist prior to the former, in this case the body. Therefore, from the linguistic aspect it is possible to show that the language implies a contradiction to the argument. The Holy Qur'ān speaks of the fact that God says, "when I have fashioned him (in due proportion) and breathed into him of My Spirit".⁷² The term used is *sawwaytuhu* which translates to mean 'after We have given him a form that is already perfect'.⁷³ This does not refer to creation reflected by the term *khalāqa*, which is prior to giving the perfect form. Another verse, "We created you then We gave you form",⁷⁴ is clear indication that the creation of the soul is prior to the creation of the body.

⁷² 38/Ṣād, 72. Translation from *The Meaning of the Holy Qur'ān*. See also 15/Al-Ḥijr, 29.

⁷³ The merits of this and the following arguments were explained to me by Professor al-Attas.

⁷⁴ 7/Al-A'rāf, 11. Translation my own.

CONCLUSION

The story of what we call Arabic or Islamic science is in part, though neither exclusively nor simply, the story of the islamization of Hellenic thought. To be sure, in what is commonly referred to as the 'Golden Age' of Islamic science and culture, there exists pressing evidence that many currents other than the Greek were flowing into the reservoir of Islamic intellectual circles. Yet it is also true that the metaphysical and cosmological framework of Arabic science in general arose out of a process of a unique comprehension, interpretation, and conceptualization of the fundamental elements as revealed by sacred doctrine. Indeed, in the hands of Muslim masters, the appropriation of a transmitted Greek legacy in which Neoplatonism loomed large, underwent such fundamental transformations as to transcend itself. Having undergone this fundamental transformation, referred to as islamization, what resulted was a new scholastic legacy no longer receptive of interpretation by any constructs other than Islamic. In other words, Muslim scholasticism cannot and should not be interpreted through the thin veneer of Greek ideas, nor can Greek ideas be understood through the exposition of Islamic ideas. Indeed, the development of the sciences from what may be referred to as the European Middle Ages down to what we call the Scientific Revolution cannot be explained if the history of this history altering transformation is absent from our perspective.

In the centuries prior to the rise of Islam, Latin Christians had accepted Greek philosophy. For them it provided a theory of the divine, as revealed in the nature of reality, and appealed to human reason. In other words, it provided a 'natural' as opposed to a 'revealed' theology. The Neoplatonic philosopher John Philoponus (died circa 570 CE), a monophysite Christian known to Islam as Yaḥyā al-Naḥwī, was one of the pioneers who attempted to harmonize Aristotelian philosophy and Christian theology, defending *formatio mundi* against Aristotle, and studying the relation between faith and

reason. Many elements of Greek philosophy were enriched by Islām. Therefore, for the Muslim masters, unlike for their Hellenistic predecessors, the search for the ultimate universal Reason no longer lay at the mercy of limited human reason. Revelation coupled with the sacred traditions and narrations of the Prophet constituted the core of Islamic sciences, a path, or a necessary precondition to be admitted upon the way of Muslim scholasticism, that is bestowed unto man by God so that man may recognize Him, His messengers, and His design.

After the emergence of Islam on the world scene, the philosophies of both Aristotle and Plato became the philosophical orthodoxy of Neoplatonic scholasticism. Aristotle's distinction between the highest God and the star-gods was prominently known and viewed in Platonic mythic perspective. His Unmoved Mover, the First Cause, had become the One for Plotinus, the supreme hypostasis existing beyond the world, from whom in a timeless hierarchical process of emanation the hypostases of Intellect and Soul were generated, finally leading to matter. Thus, admitting the Platonic distinction between the two realms of the intelligible and the sensible, reality was conceived as a hierarchical descent from the One, Itself remaining unaltered and undiminished even though it continued in creation eternally. This Plotinian metaphysics of emanation and hypostases was accepted by Christian Neoplatonists for whom by virtue of Neoplatonic philosophy, it was easy to identify the One with the God of their religion, thus successfully giving it the guise of monotheism. Muslim philosophy on the other hand did not suffer the absorption of Neoplatonism merely to explain the unity (*tawhīd*) or One-ness of the God of Islām. Their philosophy, founded upon the fundamentals of the worldview of Islām, did not share elements of Neoplatonic philosophy deemed antithetical to the revealed Word. Only if these elements were deemed complimentary would they be absorbed into the philosophical traditions of the Muslim masters. This absorption did not however, mean that ideas in both traditions were identical. On the contrary, Muslim ideas founded

upon the elements of the worldview of Islām cannot, as we have mentioned previously, be interpreted as a simple, complete adaptation of Greek currents of thought.

This rule however cannot be applied to matters concerning logic, or to ideas wherein reason does not contradict revelation. Similarly, although with varying detail and significantly different and often fundamental transformations, Muslim philosophers typically espoused Aristotle's theory of the four causes and ten categories, remained committed to his *Organon*, and as it was an integral part of the philosopher's creed in general, took over the Neoplatonic doctrine of hypostases and emanation. But what remains profound, both philosophically and historically, and carried out by the Muslim masters, is the fundamental, highly sophisticated recasting of the complex Greek legacy into an islamic mould.

Although we have, insofar as our capacity has allowed us, completed our analysis of and commentary on Athīr al-Dīn al-Mufaḍḍal ibn 'Umar al-Abharī al-Samarqandī's *Hidāyat al-Ḥikmah*, we have yet to offer reasons pertaining to the purpose of such an endeavor. Indeed we have dedicated some commentary with regard to the place of such a work as the *Hidayah* in both the Islamic intellectual milieu, and the philosophical tradition. Therefore, what benefit, if any, is to be derived from such a work in comparison with the contemporary approach to 'science'? Traditionally, the sciences in Islām were regarded as schools of interpretation, charged with elucidating upon the facts of existence in correspondence with the Qur'anic system of conceptual interrelations and its methods of interpretation, not the other way around, by interpreting the system in correspondence with the facts. Since the role of science is to be descriptive of facts, and facts undergo continual change by virtue of their underlying reality which is process, the modern sciences, devoid of the vertical relationship between man, the object of facts, and God, the Creator of these facts, consider change to be the ultimate nature of reality.

In contrast, Islamic sciences which unfolded as a direct consequence of the worldview of Islām, maintained that reality was at once both permanence *and* change. The aspect of permanence was understood to correctly signify something permanent whereby change occurs and not in the sense that change is itself permanent. In the traditional Islamic worldview the categories of knowledge which were fundamental to the Islamic tradition, are still fundamental to contemporary, modern education. Knowledge was, and still is considered as being of two kinds, and this is what concerns us here in answer to our question with reference to the benefit derived from this particular work, the *Hidayah*. The first kind of knowledge, referred to as *farḍ kifāyah* includes the natural, physical and applied sciences. The second kind of knowledge, referred to as *farḍ ‘ayn*, encompasses that pertaining to the absolute nature of God, the spiritual realities and moral truths. Clearly knowledge in reference to the latter is not static. Indeed it is dynamic, increasing in its accumulation according to both one’s spiritual and intellectual capabilities, as well as one’s responsibilities.

There is no such distinction with regard to knowledge in contemporary modern knowledge. More importantly, knowledge derived from modern methodology, bases its interpretations on secular ideology. These secular ideologies, where a clear abandonment of the vertical relationship between the sacred and the profane requires that

its concepts, presuppositions, and symbols; its empirical and rational aspects, and those impinging upon values and ethics; its interpretations of origins; its theory of knowledge; its presuppositions on the existence of an external world, of the uniformity of nature and of the rationality of natural processes; its theory of the universe; its classification of the sciences; its limitations and inter-relations with one another of the sciences, and its social relations¹

¹ See *Prolegomena*, 114.

suffer the continual process of change, destined never to arrive at conclusive results, and ultimately to certainty. Science, understood within the context of the *Hidāyah* implies an “allegorical interpretation (*ta'wīl*) of the empirical things that constitute the world of nature”.² As such, it becomes incumbent upon the seeker of true knowledge to first equip himself with the very tools by which this knowledge may be sought. Naturally for the philosopher, the science of logic becomes the primary tool by virtue of the fact that knowledge is dependant upon the spoken word. Indeed, reason attempts to understand, interpret and confront the world of nature. However, knowledge concerning the phenomenological world derived from reason alone is not evident proof of certainty. The world of nature is but a sign, the meaning of which can be understood by those armed with proper knowledge, wisdom and spiritual discernment. It is reference to this wisdom which implies the title of al-Abhari’s *Hidayat al-Ḥikmah*. Clearly, it is not the task of knowledge based on revelation to confirm the discoveries of science.

On the contrary, science merely confirms Islamic revealed truths concerning the horizontal relationship between man and the world of nature, and the vertical relationship between man and the created world, and God. One may indeed declare with some degree of certainty that the purpose of Islamic sciences was not to question the truths contained in sacred doctrine, but rather to confirm what was already clear (*muḥkamāt*), and to propose further interpretation with regard to revealed truths that appeared ambiguous (*mutashābihāt*) without deviating from the worldview of Islām as defined by the Qur’ān. Hence, these ambiguous verses contained in the Qur’ān became relevant to interpretation by the various schools of thought within the islamic intellectual milieu, a tradition reliant upon the cumulative knowledge of future generations. One may question, is it not precisely this accumulation of knowledge that defines modern science? We argue in answer that in contrast with the Western tradition of scholasticism, the later discoveries of

² Ibid., 137.

scientific truths unknown to earlier Muslim masters do not contradict the universal, spiritual and religious truths embedded in Qur'anic doctrine. The intimate relationship between truths derived from revealed knowledge, and science is therefore preserved.

PART II

TRANSLATION OF THE *HIDĀYAT AL-ḤIKMAH*

HIDĀYAT AL-ḤIKMAH

PART I - LOGIC (*al-Mantiq*)

In the name of Allah most Merciful, most Compassionate. Oh Lord! Let
the End Be Good.

Praise be to Allah, [to whom] praise is His right. Salutations be upon His prophet, Muḥammad, his family and his descendants. Now then, this is a treatise on logic [which] I have dictated (*amlaytuhā*) to some colleagues, extemporaneously (*'ala sabīl al-irtijāl*), seeking the help of Allah, exalted is He, the possessor of guidance. He is sufficient unto us and He is the best disposer of affairs.

Chapter One

An expression (*al-lafẓ*) is either:

- 1) Denotation by correspondence (*al-muṭābaqah*) which is to consider its denotation in relation to its complete *nominatum* (*musammā*), as for instance, 'man' in relation to 'rational animal', or;
- 2) Denotation by implication (*al-taḍammun*) which is to consider its denotation in relation to a part of the *nominatum*, as for instance, 'man' in relation to 'rational', or;
- 3) Denotation by entailment (*al-iltizām*) which is to consider its denotation in relation to the concomitant of the *nominatum* in the mind, as for instance, 'donkey' in relation to 'stupid', or;

Furthermore, denotation by correspondence is either:¹

- 1) Single (*mufrad*); it is that where part of it does not refer to part of its meaning, or;
- 2) Compound (*mu'allaf*); it is that which is contrary to it (i.e. the singular), as for instance 'a thrower of stones'.

Moreover, a singular [expression] is either:²

¹ The reason that al-Abharī does not discuss the other two forms of denotation is because they do not fall within the scope of logical inquiry. For denotation by correspondence is verbal and this is made clear by his explanation. The title of the chapter makes it clear that logic is possible if the idea is expressed as a *lafẓ*. This is why he goes on to discuss simple and compound expressions as cases for denotation by correspondence.

- 1) A singular; it is that which its very meaning is prevented from participation, as for instance, 'Zayd', or
- 2) A universal; it is that which is contrary to it (i.e. a particular). A universal is also either:
 - a) essential (*dhātī*); it is that which cannot be excluded from the essence of the particulars which are [classified] under it, as for instance, 'animal' in relation to 'Zayd' and others, or;
 - b) accidental (*'araḍī*); it is that which is contrary to it (i.e. the essential), as for instance 'writer' and 'laughter' in relation to 'man'.

The essential is either:

- 1) A genus, which is a universal, said of many different realities in answer [to the question] "what is it?", as for instance 'animal' in relation to 'man' and others. That which [has] no genus above it is called 'genus of genera'.
- 2) A differentia (*al-faṣl*), which is a universal said of many compatible [things] in answer [to the question] "what kind of a thing is it?", as for instance, 'rational' in relation to 'man'.
- 3) A species (*al-naw'*), which is a universal said of many different things in number only, as for instance, 'man' in relation to its individuals. Its expression is said as a species of that which is included with others [classified] under a proximate genus, as for instance, 'animal' and 'plants' in relation to 'a growing body', and is called 'relative species'. That which [has] no relative species [classified] under it is called 'species of species'.

The accidental (*al-'araḍī*), is either a property (*al-khāṣṣah*), which is that which is particular for one species, as for instance, 'writer' and 'laughter' in relation to 'man'; or a general accident, which is that which exists in two species and more, as for instance, 'blackness' and 'sleep'. Every property and general accident is either; concomitant, which is that which is not separable from the quiddity; or separable, which is that which is contrary to it. An example of a concomitant property is 'laughter in potentiality' in relation to 'man'. An example of a separable property is, 'laughter in actuality' in relation to 'man'. An example of a concomitant general

² Again we see here that al-Abhari omits the discussion concerning compound expressions. This is because although a compound expression may denote a single idea, this single idea is expressed using more than one word. In this sense it is possible to classify them as "simple ideas" which fall within the same discussion as simple expressions. It is possible to analyze compound expressions logically especially if they express complete ideas. But since al-Abhari's purpose is not a detailed study he omits such a treatment in order not to confuse the beginner. After all this is a book on logic, in fact the whole of the *Hudāyah* is meant as a propeaedeutic for the philosophical sciences.

accident is, 'evenness' in relation to 'four'. An example of a separable general accident is, 'blackness' in relation to 'man'.

Chapter Two³

The definiens (*al-mu'arrif*) of a quiddity is either a definition, or a description. Each one of the two is either complete, or incomplete.

As for a complete definition, it is a discourse denoting the reality of a thing, and therefore includes a proximate genus which is connected to a differentia, as for instance, 'rational animal' in the definition of 'man'. As for an incomplete definition, it is that which is composed of a remote genus and a differentia, like us saying, "a rational body", and "a living being" in the definition of 'man'.

As for a complete description, it is that which is [either] composed of a genus and a property, like us saying, "a laughing animal" in the definition of 'man'. As for an incomplete description, it is that which is [either] composed of a remote genus and a property, or a general accident and a property, like us saying, "a laughing body", or "a laughing being" in the definition of 'man'.

Guide⁴

A proposition is a speech of which may be said by the one who utters it that it is [either] true or false. And it is either:

- 1) Categorical, like when we say, "Zayd is a writer". That about which something is predicated is called the 'subject', and that which is predicated is called the 'predicate'.

³ We have already explained in our analysis concerning al-Abhari's logical theory why he discusses definition in logic. Here we may point out that this chapter comes after the discussion on primary concepts because as an epistemological problem, al-Abhari must show how we acquire knowledge of concepts. In other words the question is, by what method can we get knowledge of concepts? In answer, we know concepts scientifically when they are defined. This again emphasizes the role of logic in other sciences.

⁴ We have explained in our analysis why the discussion on propositions comes after definition. We may indicate here that by "speech" al-Abhari means "the combination of words in such a way that a meaningful sentence results".

2) Conjunctive conditional, like when we say, “if the sun rises, then it is day”. The first part is called the ‘antecedent’, [while] the second [part is called] the ‘consequent’.

3) Disjunctive conditional, like when we say, “the number is either even, or odd”.

Furthermore, a categorical [proposition] is either affirmative in which the judgment is [made] that something occurs to something, as has been mentioned or negative, in which the judgment is [made] by negating something from something, like when we say, “Zayd is not a writer”.

Each of the affirmative and negative [propositions] is either singular, where its subject is a specific individual, like when we say, “Zayd is a writer”, “Zayd is not a writer”; or a universal, like when we say, “every man is an animal”, “no man is a stone”; or a particular, like when we say, “some men are writers”, “some men are not writers”; or ambiguous, like when we say, “a man is a writer” and “a man is not a writer”. It (i.e. the ambiguous) has the force of a particular because judgment about “some” is certain, whereas about the totality [it is] doubtful. Therefore, we stick to convention and say that the ambiguous [proposition] is a particular [one].

By making the particle of negation part of the predicate or subject in any proposition is called equipollent, like when we say, “Zayd is a non-writer”. That [proposition] which is not equipollent is called ‘positive’ (*muḥaṣṣalat*) if it is affirmative, and simple if it is a negative. The difference between the equipollent affirmative and the simple negative is by way of the copula (*al-rābiṭah*). When the copula is prior to the particle of negation, the proposition is an equipollent affirmative. When it (i.e. the copula) is posterior [to it] (i.e. the particle of negation), the proposition is a simple negative.

A quantified proposition has conditions on the part of the subject. If we were to say, “every C is B” we do not mean it (i.e. C) as a whole, rather we mean each one of it (i.e. C); nor do we mean that which is C in potentiality, but that which is C in actuality; nor do we mean that which is C at the occasion of judgment, but that which is C either at the occasion of judgment, or prior to it, or posterior to it; nor do we mean that which is C either not permanently or permanently, but that which is C in general.

The divisions of the parts of a proposition may be further divided. [This is] because affirming the predicate of the subject or negating it from it, may be done either in actuality or in potentiality, or by that which generalizes them both. The actual is either necessary, non-necessary, or absolute.

As for the necessary, we do not mean the necessary on condition of description, like 'motion' in relation to 'the writer', and [we] do not [mean] that which is necessary with respect to time, either a determined [time] like 'an eclipse' in relation to 'the moon', or not a determined [time] like 'breathing' in relation to 'man'. Rather we mean that which is necessary with respect to permanence of the essence, like when we say, "necessarily every man is an animal", and "necessarily no man is a stone".

As for the non-necessary, it is called existential (*wujūdiyyah*). It is that in which judgment is [made] by affirming the predicate of the subject or vice-versa, in actuality non-necessarily, like when we say, "by non-necessity all men breathe", and "not necessarily no man breathes".

As for the absolute, it is that in which judgment is [made] by affirming the predicate of the subject or vice-versa, in actuality without any other restriction, like when we say, "All men breathe", and "no man breathes". [This kind of proposition] is called 'general absolute' (*al-muṭlaqah al-‘āmmah*).

As for the proposition in which judgment is [made] by affirming the predicate of the subject or vice-versa, in potentiality, [it] is [called] the 'particular possible' (*al-mumkinah al-khāṣṣah*), namely judgment in which the existence and nonexistence of the predicate in relation to the subject is not necessary, like when we say, "by a particular possibility every man is a writer", and "by a particular possibility no man is a writer".

As for the proposition in which judgment is [made] by that which generalizes potentiality and actuality, [it] is [called] the 'general possible' (*al-mumkinah al-‘āmmah*). That is to say [the proposition] in which judgment is [made] by an increase; either on the part of nonexistence, or on the part of existence, like when we say, "by

general possibility every man is a writer”, and “by general possibility no man is a writer”.

As for the conjunctive conditional [proposition], the affirmative ones are those in which judgment is [made] that the one proposition occurs when the other occurs, like when we say, “if the sun rises then it is day”. The negative [ones] are those in which judgment is [made] that the one proposition does not occur when the other occurs, like when we say, “not if the sun rises then it is night”.

As for the affirmative [proposition] it is either cogent (*luzūmiyyah*), or coincidental (*ittifāqiyyah*).

- 1) The cogent [proposition] is that in which judgment is [made] that one proposition is necessary if the other holds, like when we say, “if the sun rises it necessitates that it is day”.
- 2) The coincidental is that in which judgment is [made] that one proposition is associated when the other holds, like when we say, “if man speaks it is associated with the donkey brays”.

A universal [proposition] is that [in which] judgment is [made] about all times, like when we say, “whenever the sun rises then it is day”, and “never if the sun rises then it is night”.

A particular [proposition] is that in which judgment is made about some times, like when we say, “sometimes if you come to me I honor you”, and “sometimes if you come to me I do not honor you”.

As for the disjunctive conditional [proposition], the affirmative ones are those in which judgment is [made] about [a relation of] conflict (*ta’ānud*), like when we say, “no man is either an animal or white”. Furthermore, an affirmative [disjunctive proposition] is either veritable (*haqīqiyyah*), mutually exclusive (*māni‘at al-jam‘*), or totally exhaustive (*māni‘at al-khuluww*).

- 1) The veritable [proposition] is that in which judgment is [made] about a [relation of] conflict [which is either] affirmed or is absent. It sometimes has two parts as previously mentioned, and sometimes has [many] parts, like when we say, “this number is either more, or less, or equal”.

- 2) The incompatible is that in which judgment is [made] only about a [relation of] conflict [which is] affirmed, like when we say, “this thing is either a stone or a tree”.
- 3) The totally exhaustive is that in which judgment is [made] by the absence of a [relation of] conflict, like when we say, “Zayd is either at sea or he is not drowned”.

The universal is that in which judgment is [made] by an opposite or its absence, about all times, whereas the particular is that in which judgment is [made] about some of the times.

Guide

Two contradictory propositions are both different in terms of negation and affirmation in such a way that requires that one of them is true while the other is false. A contradiction between two singular [propositions] can only be ascertained under eight conditions:

- 1) The unity of the predicate (*al-musnad*)
- 2) The unity of the subject (*al-musnad ilayhi*)
- 3) The unity of relation
- 4) The unity of time
- 5) The unity of place
- 6) The unity of condition
- 7) Potentiality and actuality
- 8) The particular and the universal

In ascertaining a contradiction between two singular [propositions], a ninth condition should be considered, and this is the difference in quantity. [This is] because two universals can be false, like when we say, “every man is a writer”, “no man is a writer”. Also, two particulars can be true, like when we say, “some men are writers”, “some men are not writers”.

The contradictory [proposition] of the universal affirmative is the particular negative, and the contradictory [proposition] of the universal negative is the particular affirmative.

Guide⁵

The conversion of a proposition is that [where] its subject is made the predicate, and [where] its predicate is [made] the subject; or [where] its antecedent is [made] the consequent, and [where] its consequent is [made] the antecedent; while [in both possibilities], negation, affirmation, truth, and falsehood remain unchanged.

Know that [the converted proposition of] the necessary negative among categorical propositions is similar to itself, because if we were to say, “necessarily no B is C”, what we mean is that it is impossible for C and B to combine and so therefore, “necessarily no C is B”.⁶

As for the existential negative, the general absolute, the particular and general possible [propositions], they do not necessarily have a conversion. [This is] because it is true in these ways that “no human breathes”, but it is not true that “no breather is human” because some breathers are necessarily human.

As for the affirmative, be it a universal or a particular, it does not necessarily convert as a universal. [This is] because it is true that “all men are animals”, but it is not true that “all animals are human”. However, it (i.e. the universal affirmative) converts as a particular in quantity.

As for the modalities necessary, existential, and absolute, they convert as the general absolute. [This is] because if it is true that every C is B with these modalities

⁵ No matter how brief it may be al-Abhari treats all aspects of propositions as opposed to his treatment of the first part in logic, viz., expressions. This is because the aim of logical inquiry is to study propositions and their higher combinations, called “syllogism”, although his treatment is cursory and brief. He leaves the details of his discussions for commentaries so that students may benefit from instruction by their masters.

⁶ By converted proposition al-Abhari means a validly converted proposition.

[it would be possible for] one to find it in existence, specifiable and describable as C is B in actuality, and therefore some B is C in actuality along with the fact that it has the modalities of necessary and non necessary, and this is the general absolute.

As for the possible, be it particular or general, it converts as a general possible. [This is] because if it is true that by a particular or general possibility all or some C is B, then it is true that by a general possibility some B is C; if it were then necessarily no B is necessarily C, therefore, no C is B whereas by a particular or general possibility all or some C is B. This is a contradiction.

As for the particular negative, it does not have a conversion. [This is] because it is true that some animals are not human, but it is not true that some men are not animals.

As far as the conjunctive conditional [proposition] is concerned, if it is a universal negative, then it converts as a universal, but if it is a particular [negative], then it has no conversion. As for the affirmative, if it is a universal, then it converts as a particular; and if it is a particular, then it also converts as a particular. The explanation in each case is similar to what has been mentioned concerning categorical propositions.

Guide

On Syllogism (*al-Qiyās*)⁷

[Syllogism] is a speech composed of utterances [that] when sound, [there] necessarily [follows] from them, taken in themselves, another speech. [A syllogism] is either:

⁷ We have explained further some salient points concerning syllogism in our analysis of al-Abhari's logical theory. Our attention is drawn to the terminology utilized in his definition, such as "speech", and "utterance" which indicate the verbal character of logic. This is the general approach of all Muslim logicians. One may express this feature as such that "without language, logic is not possible". We may again emphasize here that "speech" means "a complete sentence" but composed as a "serious discourse", otherwise an argument cannot be formed.

- 1) Conjunctive (*al-qiyās al-iqtirānī*), where neither the conclusion itself nor its contrary is actually mentioned in it, like when we say:

Every C is B
Every B is A

- 2) Repetitive⁸ (*al-qiyās al-istithnā'ī*). This [kind of syllogism] is where one of the two (i.e. either the conclusion itself or its contrary) is actually mentioned in it, like when we say:

If the sun rises, then it is day
But the sun has risen
∴ It is day

Or;

[If the sun rises, then it is day]
But it is not day
∴ The sun did not rise

The repeated term (*al-mukarrar*) in both premises of a conjunctive syllogism is called the 'middle term' (*al-ḥadd al-awsaṭ*). That [term], in the required [conclusion], about which something is predicated is called the 'minor term' (*al-ḥadd al-asghar*). That [term] which becomes the predicate is called the 'major term' (*al-ḥadd al-akbar*). The premise which contains the minor [term] is called the 'minor [premise]', and that which contains the major [term] is called the 'major [premise]'. The composition resulting from the manner in which the middle term is placed with regard to the other two terms, is called the 'figure' (*al-shakl*). The conjunction [between] the minor [premise] and the major [premise] is called the 'connection' (*qarīnah*). The conclusive connection that results by itself is syllogism.

Furthermore, the two premises of a conjunctive [syllogism] are either two categorical propositions, or are not [two categorical propositions]. In the former case there are four figures:

- 1) If the middle term is a predicate in the minor [premise] and a subject in the major [premise], then it is the first figure.

⁸ Can also be read exceptive.

- 2) If it (i.e. the middle term) is a predicate in both [premises], then it is the second figure.
- 3) If it (i.e. the middle term) is a subject in both [premises], then it is the third figure.
- 4) If it (i.e. the middle term) is a subject in the minor [premise] and a predicate in the major [premise], then it is the fourth figure.

Indeed, logicians have rejected it (i.e. the fourth figure) because the mind cannot comprehend its analogy. Furthermore, the effort in order to [extract] its conclusion is greater than the inquiry [into] the question. Considering this it would not be proper for it to be included in this summary. Therefore, this treatise is limited to the three figures.

As for the first figure, in order for it to be conclusive, the minor [premise must be] affirmative, and the major [premise must] be a universal. Hence, there are four conclusive moods (*al-durūb al-muntajih*). [The four consist of:]

- 1) Two universal affirmative [premises] yielding a universal affirmative. An example of it is:

Every C is B
Every B is A
∴ Every C is A

- 2) Two universal [premises], the major premise [being] negative, yielding a universal negative. An example of it is:

Every C is B
No B is A
∴ No C is A

- 3) Two affirmatives, the minor [premise being] a particular, yielding a particular affirmative. An example of it is:

Some C is B
Every B is A
∴ Some C is A

- 4) A particular affirmative minor [premise], and a universal negative major [premise] , yielding a particular negative. An example of it is:

Some C is B
No B is A
∴ Some C is not A

As for the second figure, in order for it to be conclusive, [there must be] a difference in premises in relation to affirmation and negation, and the major [premise must] be a universal besides being an opposite in regards to both premises. The conclusive moods of [the second figure] are four:

- 1) From two universal [premises], the major [premise being] negative, yielding a universal negative. [An example of it is]:

Every C is B
No A is B
∴ No C is A

- 2) From two universal [premises], the minor [premise being] negative, yielding a universal negative. [An example of it is]:

No C is B
Every A is B
∴ No C is A

- 3) From a particular affirmative minor [premise] and a universal negative major [premise], yielding a particular negative. [An example of it is]:

Some C is B
No A is B
∴ Some C is not A

- 4) From a particular negative minor [premise] and a universal affirmative major [premise], yielding a particular negative. [An example of it is]:

Some C is not B
Every A is B
∴ Some C is not A

As for the third figure, in order for it to be conclusive, the minor [premise must be] affirmative, and one of its two premises [must] be a universal. Hence, its conclusive moods are six:

- 1) From two universal affirmative [premises], yielding a particular affirmative. [An example of it is]:

Every C is A
Every C is B
∴ Some A is B

- 2) From two universal [premises], the major [premise being] a negative, yielding a particular negative. [An example of it is]:

Every C is B
 No C is A
 \therefore Some B is not A

- 3) From two affirmative [premises], the minor [premise being] a particular, yielding a particular affirmative. [An example of it is]:

Some C is B
 Every C is A
 \therefore Some B is A

- 4) From a particular affirmative minor [premise] and a universal negative major [premise], yielding a particular negative. [An example of it is]:

Some C is B
 No C is A
 \therefore Some B is not A

- 5) From two affirmative [premises], the major [premise being] a particular, yielding a particular affirmative. [An example of it is]:

Every C is B
 Some C is A
 \therefore Some B is A

- 6) From a universal affirmative minor [premise] and a particular negative major [premise], yielding a particular negative. [An example of it is]:

Every C is B
 Some C is not A
 \therefore Some B is not A

Guide

Know that when the minor [premise] in the first figure is a necessary, an existential, or a general absolute, then the conclusion is in agreement with the major [premise]. When it (i.e. the minor premise) is a particular or a general possible, then it, despite [being] possible, yields a necessary. [This is] because if the middle [term] is actually obtained, then the conclusion is necessary, and if it is necessary as a result of something possible, then it is necessary at the same time; otherwise it would follow that which is not necessary would be transformed into that which is necessarily, [and] this is absurd. [Furthermore], together with an existential and a particular possible, it yields a particular possible, because that which is possible for the possible is possible. [In addition], together with the [general] absolute and the general possible, it yields a

general possible, because if the major [premise] is true, then the conclusion is necessary otherwise the conclusion would be a particular possible, and the common denominator is the general possible.

As for the second figure, know that when one of the two premises from this figure is necessary, then the conclusion is [also] necessary. [This is] because the necessity of the middle [term] is obtained by necessity due to one of the two extreme terms and is negated by necessity due to the other extreme. [There] is a necessary difference between the two extremes. As for the combination of the absolute, the existential, and the possible with each other in this figure this does not yield [a conclusion]. [This is] because one and the same predicate may be obtained for something and negated from it in these modes whereas despite [the fact that] it is not possible to negate the thing from itself, like when we say, “no man breathes” in these modes but it does not yield “no man is a man”.

As for the third figure, the modalities of its conclusion are as in the first [figure].

The second division of a conjunctive syllogism is that both its antecedents are not two categorical [propositions, namely that] it is composed of either two conjunctive [propositions], two disjunctive [propositions], a categorical and a conjunctive, a categorical and a disjunctive, or a conjunctive and a disjunctive. An example of the first is:

Whenever the sun rises, then it is day
Whenever it is day, then the earth is illuminated
∴ Whenever the sun rises, then the earth is illuminated

An example of the second is:

Every body is either celestial or elemental
Every elemental [body] is either heavy or light
∴ Every body is either heavy, light, or celestial

An example of the third is:

Whenever this is a man, then it is an animal
Every animal is a body
∴ Whenever this is a man, then it is a body

An example of the fourth is:

Every number is either even or odd
Every even number is divisible into two equal parts
∴ Every number is either divisible into two equal parts or is odd

An example of the fifth is:

Whenever this is a man, then it is an animal
Every animal is either tall or short
∴ Whenever this is a man, then it is either tall or short

This is the discussion of conjunctive [syllogisms].

As for repetitive syllogism, the [kind] of proposition on which it is based is either a disjunctive or a conjunctive. If it is a conjunctive [proposition], then the repetition of the very antecedent yields the very consequent, and the repetition of the negation of the consequent yields the negation of the antecedent. On the other hand, if the repetition is identical to the consequent and the negation of the antecedent, then it does not yield [anything].

If it is a disjunctive [proposition], then it is either veritable, mutually exclusive, or totally exhaustive. If it is veritable, then it either has two parts; in that case the repetition of the [affirmation of] either one of them yields the negation of the consequent, and the repetition of the negation of either one of them yields the very consequent. If it has [many] parts, then the repetition of the affirmation of any one of them yields the negation of the remaining [ones]. Moreover, the repetition of the negation of any one of them yields a disjunctive [proposition] composed of the remaining parts.

If it is mutually exclusive, then [from] the exception of the affirmation of one of the two [parts] yields the negation of the other [part]. On the other hand, if the repetition is the negation of one of them, then it does not yield [anything].

If it is totally exhaustive, then the repetition of the negation of one of them yields the affirmation of the other, but the repetition of the affirmation of one of the two [parts] does not yield anything.

Guide

Reductio ad absurdum (*al-khulf*) is a [kind of] syllogism which shows the affirmation of the question from the falsity of its contradictory, like when we say, “if it is not true that some humans are not Negroes”, then its contrary is true, and that is that we say:

All men are Negroes
Also, All Negroes are black, for this is a true premise
∴ If it is not true that some men are not Negroes, then all men are black.

However, the consequent is false, and therefore so too the antecedent.

Enthymeme (*al-ḍamīr*) is a [kind] of syllogism in which the major [premise] is omitted either due to its obviousness, or because it is false in itself so that were it explicitly [stated] its falsity would become clear, and in doing so, one excludes from the syllogism any of those not related to the truth. An example of the first: The influentiality of a thing on a thing is different from that thing. [This is] because it is possible to think of one of them while ignoring the other, and therefore, the [former] is different from it. So the omission of the major premise, which is our claim is that [if] [for] everything, it is possible to think of one of them while the other is ignored, [then] therefore, they are both different.

An example of the second: “A [certain] person who roams around at night is a thief”. Here the major [premise] is omitted, namely: “everyone who roams around at night is a thief”.

Demonstration (*al-burhān*) is a syllogism whose premises are composed of certain propositions leading to certainty. A dialectic argument (*al-jadal*) is a syllogism composed of well known or accepted premises which are accepted by the opponent. Rhetoric (*al-khiṭābah*) is a syllogism composed of accepted premises taken [on the authority] of a person who believes them, or [it is a syllogism composed of] presumptions. Poetry (*al-shi‘r*) is a syllogism composed of premises of phantasy by which the soul feels melancholy or becomes happy. Sophistry (*al-sūfaṣṭā’iyyah*) is a syllogism composed of imagined premises, or [composed of premises] resembling the truth or well-known [premises] because the connection between them is either one term or a meaning.

Guide

Fallacy (*al-ghalaṭ*) is a syllogism [which] either occurs on the part of its matter, which is the premises, or on the part of its form, which is its composition, or on both [parts] together. As for fallacy on the part of the matter [of syllogism], the premises and those [premises] resembling the truth are falsified either by one term or by a meaning. As for fallacy on the part of the form [of syllogism] it is that its composition is not the composition of one of the forms because there is no common term in the two premises, such as, if the middle term is homonymous or [its composition] is the composition of one of the forms but the condition of validity does not occur, or the minor [term] and the middle [term], or the middle [term] and the major [term] are designated by two synonyms. It (i.e. fallacy) prevents finding the question (i.e. what is sought).

Whosoever wishes to examine in detail what we have mentioned regarding the general concepts and study on logic may consult our book entitled the quintessence of

secrets, God it is who is the friend of the righteous. And so here endeth the treatise on the logical rules.

PART II - PHYSICS (*al-Ṭab‘iyyāt*)

[2] The second part is on physics (*al-ṭab‘iyyāt*), and is arranged according to three sciences (*funūn*).¹

THE FIRST SCIENCE

ON WHAT IS COMMON TO BODIES (*al-ajsām*)

[This science] comprises ten chapters.

Chapter One

On the Refutation of the Indivisible Particle (*al-juz‘ alladhī lā yatajazz‘a*).

If we were to assume a particle in between two particles, the middle is either an obstacle preventing both extreme [particles] from meeting, or it is not. The latter is impossible because if it² were not an obstacle, then the particles would have been [3] interpenetrable³, and therefore, [the middle] cannot be a middle and an extreme [at the same time], whereas we have [indeed] assumed a middle and a side. This is a contradiction. Therefore, it has been established that [the middle] is an obstacle preventing their meeting, and since the point where the middle meets one of the two

¹ The fact that physics comes after logic reveals an epistemological principle which we have explained in our analysis. But al-Abhari's treatment of this science is not detailed in comparison with Ibn Sīnā's *Kitāb al-Shifā'*. This is again due to purpose for which this book was composed. The divisions of physics are expressed as "sciences" (*funūn*) which indicate sub-branches of this science. But al-Abhari does not specifically identify these sciences. It is possible, however, to identify them on the basis of the subjects he discusses within these divisions. Accordingly, the first subdivision lays the basic notions of physics in order to explain movement. Therefore, the basic notions of physics ends with his theory of motion. The second subdivision is the physics of celestial spheres. This science addresses the cosmology of heavenly bodies in such a way that it is possible to relate them to the corporeal world, this earth. The third subdivision is problematic because it combines other subdivisions of physics as well. First to be discussed is meteorology, then biology, followed by zoology, and finally psychology. The reason he combines all these sciences under one heading is due to "simplicity". As we have repeatedly mentioned, the *Hidāyah* is meant as a propeadeutic for the sciences. No other reason for this arrangement is apparent in any of the discussions.

² i.e. the middle

³ i.e. contained one in the other.

extremes is different from [the point] where it meets the other extreme, thus it is divisible.

For if we were to assume a particle at the junction of two particles, then either [that particle would] meet only one of them, or both of them together, or one part from each of them both. The first is impossible, otherwise it⁴ would not be at the junction. So one of the remaining two possibilities would be determined. Hence, it is necessarily divisible.

[4] Chapter Two

On the Proof of [the existence of] Prime Matter (*Ithbāt al-Hayūlā*)

Every body (*jism*) is composed of two parts, one of them indwelling in the other. The substratum (*al-maḥall*) is called prime matter (*al-hayūlā*), and the indweller (*al-hāll*) [is called] the form.⁵ The proof is that some bodies which are receptive of separation, for example, water and fire, must be in themselves one and continuous otherwise the indivisible particle becomes necessary. This proof necessarily establishes [the existence] of prime matter in all bodies [alike] because [5] that continuous thing is susceptible of separation. That which is receptive of separation in reality may either be a magnitude (*miqdār*), or a form⁶ necessitating magnitude (*al-ṣūrah al-mustalzimah*), or something else. The first and the second are impossible otherwise continuity and divisibility would occur simultaneously, and what is receptive and that which is received must exist together. This leads us to conclude that the receptive is

⁴ i.e. the particle.

⁵ Al-Abhari's analysis of body as a thing is concise here. First the usage of the term "part" (*juz'*) does not mean that a body is divisible into two parts, although his language lends itself for such an interpretation. Hence further analysis is required. We may thus say, as we have indicated in our analysis of physics in the fourth chapter, that a thing is analyzable into form and matter. Since it is the form that is primary in this analysis, it must inhere in matter when it is combined with it; the matter is taken here as the indwelling and as such is called "substratum". It is clear therefore, that the substratum is the combination of both matter and form which in turn yields "corporeal form". The rest of this chapter is devoted to the proof of existence of one element within this physical composition; matter (*hayūlā*)

⁶ i.e. a corporeal form

something else, and that is prime matter. If it has been established that a body is composed of prime matter and form, [then] all bodies must be composed [6] of prime matter and form because the magnitudinal nature (*al-ṭabī'ah al-miqdāriyyah*) may either by itself be independent of the substratum, or not. The former is impossible, otherwise its⁷ indwelling in the required substratum would be impossible due to its need for it⁸. [This is] because the indwelling of that which is independent of a thing in itself, in a thing is impossible. Therefore, it⁹ in itself necessarily needs the [required] substratum. Hence, every body is composed of prime matter and form.

Chapter Three

On Corporeal Form (*al-ṣūrah al-jismiyyah*)

Corporeal form cannot exist independently from prime matter because if it were to exist by itself without its indwelling (*hulūl*) [7] in prime matter, then it would either be finite (*mutanāhiyah*) or infinite (*ghayr mutanāhiyah*). The latter is impossible, because all bodies are finite, otherwise it would be possible for two extensions (*imtidādān*) to come forth from a single origin in the same manner as if both were two sides of a triangle; the greater they become [in extension] the larger the distance between them becomes. Therefore, if they both were extended to infinity, it would be possible for the distance between them to be infinite although limited (*maḥṣūr*) by two limitations. This is absurd.

As for the explanation of the impossibility of the former it is because [8] if it were finite, then it would be encompassed by one border (*ḥadd*) or many borders. Then it acquires a shape (*mutashakkilah*) because shape (*al-shakl*) is a composition resulting from the encompassment by one border or many borders of a magnitude. Hence, that shape may either be due to corporeality (*al-jismiyyah*) in itself, and this is

⁷ i.e. the natural magnitude

⁸ i.e. the required substratum

⁹ i.e. the natural magnitude

impossible, otherwise all bodies would have a single shape; or it is due to a cause concomitant of corporeality, and this is also impossible for the reason we have already mentioned; or it is due to a cause accidental to it¹⁰, and this is also impossible, otherwise its disappearance would be possible, and therefore it would be possible for the form (*al-ṣūrah*) to take on another shape (*al-shakl*). Then it would be separable, and everything that is separable is composed of prime matter and form. Therefore, form [which is] devoid of prime matter is conjoined to it. This is absurd.

[9] Chapter Four

Prime Matter is not free from Form.

Prime matter is not free from form because if it were free from form it would either have a position (*wad'*) or not. Neither of them is possible, and therefore, it is not possible for it¹¹ to be free from form.¹² As for the impossibility of the former, it is because it¹³ is either divisible, or not. The latter is impossible¹⁴ because everything having a position is divisible as we have already mentioned in the refutation of the indivisible particle. And the former is impossible because it can either be divided in one direction and would therefore be a line, or into two directions and would therefore be a substantive surface, or into three directions and would therefore be a body. Each one of them is false; either because it¹⁵ cannot be a line because [10] the existence of a line independently is impossible, because if the extremes of two surfaces ends up at it,¹⁶ then the meeting of both is either obstructed (*yahjub*), or not. It is not possible that it is not obstructed otherwise the lines would necessarily intertwine. This is impossible because the sum of two lines is greater than the [sum of] one [line], whereas being

¹⁰ i.e. corporeality

¹¹ i.e. matter

¹² In potentially prime matter cannot have any form. In other words prime matter in potentiality is not receptive of form.

¹³ i.e. the thing having a position

¹⁴ i.e. being not divisible

¹⁵ i.e. prime matter

¹⁶ i.e. the line

intertwined necessitates its contrary. It cannot be that it is obstructed otherwise the line would be divided into two directions because that which encounters one of them is different from that which encounters the other, and this is impossible. It is not possible for it to be a surface because if it¹⁷ were a surface, then if the extremes of two bodies would end up at [the surface], then it must either encounter both of them, or not. Both of these possibilities are false according to what has already been previously mentioned in [reference to] a line. [11] It is not possible for it to be a body, because if it were a body, then it would be composed of prime matter and form as previously mentioned.

As for the impossibility of the latter, if it¹⁸ were not having a position, then if the corporeal form (*al-ṣūrah al-jismiyyah*) would be connected with it, then either it does not occur in a place at all, or it occurs in all places, or it occurs in some places and not in other [places]. The first and second are both obviously impossible, and so is the third because its¹⁹ occurrence in any place is possible. Therefore if it occurred in some places and not in other [places], preponderance is necessary without the preponderating principle (*murajjih*), and this is impossible. It is not necessary, based on this account, that when water becomes air or vice versa²⁰ it becomes more entitled to a position because the previous position requires [12] the subsequent position. Therefore there cannot be preponderance without a preponderating principle.

Chapter Five

On the Form Pertaining to Species (*al-ṣūrah al-naw'īyyah*)

Know that each one of the natural bodies has a form other than the corporeal form because some bodies have specific places. This is not due to an external factor nor to

¹⁷ i.e. prime matter

¹⁸ i.e. prime matter

¹⁹ i.e. prime matter

²⁰ i.e. that air becomes water

prime matter, but either due to the general corporeal [form] or by having another form. The former²¹ is impossible, otherwise all bodies would participate in [having the same place]. Therefore the latter²² has been established, and this is what is sought.

Guide

Know that prime matter is not the cause of the form, because it does not exist in actuality prior to the existence of the form, as was mentioned previously. The efficient cause (*al-'illah al-fā'iliyyah*) [13] of a thing must exist prior to it²³. Similarly, the form is not the cause of prime matter, because the form must exist together with the shape or through the shape, and the shape cannot exist prior to prime matter. Hence, if the form were the cause of the existence of prime matter, then it would precede prime matter, and this is absurd. Therefore, the existence of both of them is from a separate cause. Prime matter is not independent of form in every respect as we have already shown, for it is not constituted in actuality without a form. Likewise, the form is not independent of prime matter in every respect as we have already shown, for it cannot exist without the shape which needs prime matter. Therefore, prime matter needs the form for its continued existence²⁴, and the form needs prime matter [14] in order for its being shaped.

Chapter Six

On Place (*al-makān*)

Place is either a void (*al-khalā'*) or an interior surface (*al-saṭḥ al-bāṭin*) of a surrounding body, touching the exterior surface (*al-saṭḥ al-zāhir*), of the body which is surrounded. The former is false. Therefore, the latter has become incumbent. We

²¹ i.e. general corporeal form

²² i.e. having another form

²³ i.e. the thing

²⁴ In this sense al-Abhari means "existence in actuality". For those well versed in Aristotelian physics this is clear and that is perhaps why he does not prolong his discussion. But a novice requires further interpretation.

said of the former that it is false because if it were a void it would either be sheer nothingness, or a [physical] dimension existing free from matter. The first²⁵ is not possible because one void may be smaller than another for the void between two walls is smaller than the void between two cities. It is impossible for that which allows more (*al-ziyādah*) and less (*al-nuqṣān*) to be sheer nothingness. The second²⁶ is not possible because if the dimension were to exist free from prime matter, it would itself be independent of a substratum. Therefore it is impossible for it²⁷ to be combined with it²⁸. [Therefore] this [argument] is absurd.²⁹

[15] Chapter Seven

On Place (*al-ḥaiz*)

Every body has a natural place (*ḥaiz ṭabīʿī*) because if we were to assume the absence of constraints (*qawāsir*), then it³⁰ would be in a [certain] place. That place is occupied by a body either by itself, or by a constraint. The latter is not possible because we have already assumed the absence of constraints. Hence, the first has become incumbent. Therefore it occupies [the place] due to its nature. This is what is sought. No body can have two natural places because if it were to have two natural places, then if it occurs in one of the two [places] it either tries to reach the second [place], or not. If it tries to reach the second [place], it follows that the first place, in which it occurred is not natural and [indeed] we have already assumed it [to be] natural.

²⁵ i.e. sheer nothingness

²⁶ i.e. a [physical] dimension existing free from matter

²⁷ i.e. the [physical] dimension existing free from matter

²⁸ i.e. prime matter

²⁹ *It would appear that al-Abhari considers place (*makān*) to be an accident of bodies, which is clear in his definition of place as the "interior surface of a body containing and touching the exterior surface of the body contained". This means that apart from the physical limits of a body, there is no place, for if there were it would be "empty space", or void. But he does not admit void, hence, there is no place between bodies. This does not mean that bodies do not have a place (*ḥaiz*). Place (*al-ḥaiz*) in reference to bodies is a particular place in relation to a particular body whereas place (*al-makān*) does not particularly refer to a particular body. Therefore are we to conclude that place (*al-makān*) is the universal place? It would certainly appear that this is what al-Abhari is positing. The explanation of particularized places are called "natural places" which he explains in the following chapter.

³⁰ i.e. the body

[Therefore], this [argument] is absurd. If it does not try to reach the second [place], it follows that [16] the second place cannot be natural whereas we have already assumed it to be as such. This [argument] is [also] absurd.

Chapter Eight

On Shape (*al-shakl*)

Every body has a natural shape (*al-shakl al-ṭabīʿī*) because every body is finite, and everything finite is shaped (*mutashakkil*). Everything that is shaped has a natural shape, so therefore, every body has a natural shape. As for [the fact] that every body is finite, it has already been mentioned. As for [the fact] that everything finite is shaped, it is because it³¹ is [being] encompassed by one border or by many borders, and therefore, it is shaped. We have said that everything [that is] shaped has a natural shape, because if we assume the removal of constraints then it³² would have a determined shape. That shape is either by nature or by a constraint (*qāsir*). The latter is not possible because we have already assumed the absence of constraints, and therefore, it is by nature and this is what is sought.

Chapter Nine

On Motion (*al-ḥarakah*) and Being at Rest (*al-sukūn*)

As for motion, it is the departure [17] from potentiality (*al-quwwah*) to actuality (*al-fiʿl*) gradually. As for being at rest (*al-sukūn*), it is the absence of motion from something whose nature is to be in motion. Every moving body (*mutaḥarrik*) has a non-corporeal mover (*muḥarrik ghayr al-jismiyyah*) because if a body were to move on account of it being a body, then every body would [continuously] be in motion. The consequent is false and therefore, so too is the antecedent.

³¹ i.e. the body

³² i.e. the thing shaped

Motion [is divided] into four divisions:

- 1) Motion in Quantity (*ḥarakah fi'l-kamm*), such as, growth (*al-numūw*) and diminution (*dhubūl*).
- 2) Motion in Quality (*ḥarakah fi'l-kaif*), such as, the heating of water and its cooling while it retains its form of species. This motion is called 'change'³³ (*istiḥālah*).
- 3) Motion in place (*ḥarakah fi'l-ain*). It is the gradual transition of a body from one place to another, and is called 'change of place'
- 4) Motion in Position (*ḥarakah fi'l-waḍ'*). That is the circular motion (*al-istidārah*) of a body. [18] Its³⁴ parts are in different from the parts of its place³⁵ and the whole [body] persists in its place. [Indeed] the relation (*nisbah*) of its parts to the parts of its place varies gradually.

We also say [that] the motion of a body by itself (*al-ḥarakah al-dhātiyyah*) is either natural [motion] (*ṭabī'iyah*), coercive [motion] (*qasriyyah*), or voluntary [motion] (*irādiyyah*). [This is] because the motive power (*al-quwwah al-muḥarrikah*) is either derived (*mustafādah*) from an external [cause], or not. If it is not derived from an external [cause], then it either has consciousness, or not. If it has consciousness, then it is voluntary motion (*al-ḥarakah al-irādiyyah*). If it does not have consciousness, then it is natural motion (*al-ḥarakah al-ṭabī'iyah*). If it³⁶ is derived from an external [cause], then it is coercive motion (*al-ḥarakah al-qasriyyah*).

Chapter Ten

On Time (*al-zamān*)

Let us assume a motion occurring along a distance at a certain speed, and [19] let another motion begin which is slower than it, so that they both have the same instance of starting (*al-akhadh*) and the same instance of stopping (*al-tark*). The slower [motion] traverses less distance than the faster one; and the faster [motion] traverses

³³ or transformation

³⁴ i.e. parts of the body

³⁵ i.e. from parts of the place of the body

³⁶ i.e. the motive faculty

more distance than the latter. If this is the case, then between the instance of starting of the faster [motion] and its instance of rest is a potency (*imkān*) allowing a certain distance to be traversed at a certain speed and a distance which is less if traversed at a certain slowness. This potency is receptive of addition and diminution, and is not constant. [This is] because its parts (*ajzā'*) do not exist together, and therefore, this potency is measurable but not fixed. This is part of the meaning of time. It is a measure of motion because it³⁷ is a quantity. Time is necessarily either the measure of a complete condition (*al-hay'ah qārrah*), or [the measure] of an incomplete condition (*al-hay'ah ghayr qārrah*). The former is not possible because time is incomplete, [20] and that which is incomplete cannot be the measure of a complete condition. It is therefore the measure of an incomplete condition. Every incomplete condition is motion. So time is a measure of motion, and this is what is sought.

We also say that time has no beginning and no end. [This is] because if it had a beginning then its nonexistence would be prior to its existence, such that this priority is not together with posteriority. Every priority which is not together with posteriority is temporal, and hence, there would be time before time. This is absurd. If it had an end, its nonexistence would be posterior to its existence, such that this posteriority is not together with priority. Therefore, it is temporal and hence, there would be time after time. This is [also] absurd.

³⁷ i.e. time

THE SECOND SCIENCE
ON THE CELESTIAL SPHERES³⁸

[This science] contains eight chapters.

Chapter One

On establishing [the fact] that A Celestial Sphere [21] is Circular, and its Explanation.

There are two directions (*jihatān*) [that] do not change [in reality]; one of the two is above, the other is below. Each of the two is an existent having a position which is indivisible with regard to the extensibility of the source of motion. When it is so³⁹, a celestial sphere is circular. We have said that the direction is an existent having a position because if it were not so, it would not have been possible to point to it, and the direction of what moves towards it would not have been possible [either]. We have said that it is indivisible because if it were divisible, and what moves would reach the closer one of two parts of a direction and moves, then it moves away from the goal⁴⁰ or towards the goal; if it moves away from the goal, the direction which is closer than the other would not be farther than the other; and if it moves towards the goal, that direction would not be nearer to the other. If this has been established, we then say [that] the directions are determined [22] neither in a void, because of its impossibility, nor in a homogeneous plenum (*malā' mutashābih*); otherwise the two directions would not be different naturally; then one of the two would not be what is sought (*al-maṭlūb*), while the other would not be left behind (*matrūkah*). Hence this is absurd. Therefore the directions are determined by the extremes [which are] outside the homogeneous plenum, and when that is so, they (i.e. the directions) are determined

³⁸ The arrangement of the discussion concerning celestial spheres follows Ibn Sinā and Aristotle.

³⁹ i.e. when it has two existent directions.

⁴⁰ i.e. direction.

by a spherical body (*jism kuriyy*) because their determination is either by a single body, or by more than one [body]. If they are [determined] by a single body, it is necessarily spherical (*kuriyy*) because the body which is not spherical does not determine the direction 'below' or 'down'. [This is] because the lower direction is at the furthest distance,⁴¹ otherwise it would have changed, in relation to that which is farther than it. And the furthest distance would not be determined by it⁴², and therefore, the direction 'below' would not be determined by it. If [the directions] were [determined] by multiple bodies, [23] then they necessarily surround each other otherwise the furthest distance is not determined by them because that which is farther from some of them is then nearer to others, and whenever one assumes something to be at the furthest distance from one of them, it is not at the furthest distance from all of them. Therefore, it is necessary that they surround each other. Hence, what is sought has been acquired.

Chapter Two

A Celestial Sphere is Simple (*basīṭah*)

A celestial sphere is simple; in other words, it cannot be composed of bodies [having] different natures because it not receptive of linear motion (*al-ḥarakah al-mustaqīmah*). When this is so⁴³ it is simple. As for [the fact] that it⁴⁴ is not receptive of linear motion, it is because everything that is receptive [24] of linear motion moves towards one direction leaving the other⁴⁵. Hence, the directions are determined prior to everything whose nature is as such, and not by them. This is not so for a celestial sphere, on the contrary, the directions are determined by it⁴⁶ and therefore, is not receptive of linear motion. This being the case, [a celestial sphere] must be simple,

⁴¹ or at the farthest distance

⁴² i.e. the body which is not spherical

⁴³ i.e. when it not composed of bodies

⁴⁴ i.e. a celestial sphere

⁴⁵ i.e. unidirectional

⁴⁶ i.e. celestial sphere

because if it were composed (*murakkab*), then each of its parts would either have a natural shape, or a constrained [shape]. The former is not possible; otherwise each of them would be spherical, because the natural shape of something simple is a sphere. So if each one of them were a sphere, it would be impossible to obtain from them, taken together, a spherical surface whose parts are connected. The latter is not possible because if each of them were not a sphere, then [in this regard, the celestial sphere] would yearn for the natural shape and would therefore be receptive of linear motion.

Chapter Three

A Celestial Sphere is Receptive of Circular Motion (*al-ḥarakah al-mustadīrah*).

A celestial sphere is receptive of circular motion because each [25] of its parts which are assumed [to exist] in it⁴⁷, is not specified by something which requires the occurrence of a certain position (*wad' mu'ayyan*) and a certain opposition (*muḥādhāh muta'ayyanah*) due to the fact that all the parts are equal in nature. Hence, it is possible for every part to leave its position. When that is so, it is receptive of circular motion and we also say that it necessarily has a principle of inclination towards circular motion by which it moves, otherwise it would not be receptive of circular motion. However, the consequent is false, and therefore, so is the antecedent. The proof of this conditional proposition is that, if it⁴⁸ does not have a principle of inclination to circular motion in its nature, then it would not receive the inclination from without. Therefore there would be no inclination in it at all, and hence, would be impossible [for the celestial sphere] to move in a circle. We are simply saying that if it did not have a principle of inclination towards circular motion, it would not receive an inclination from without, because if its motion were from without, [26] then in a time it would cover a distance. That time is shorter than the time of motion [of something]

⁴⁷ i.e. a celestial sphere

⁴⁸ i.e. a circular celestial sphere

which has an inclination, and moves along the same distance; otherwise a thing together with an obstacle would have been as if it were without it⁴⁹. This is absurd. That shorter time (*al-zamān al-aqṣar*) has a proportion (*nisbah*), undoubtedly, to the longer time (*al-zamān al-aṭwal*). If we assume something with another inclination, namely an inclination which is weaker than the first inclination, such that its relation to the first inclination is equal to its relation of the shorter time to the longer time, then it moves with the same force⁵⁰ in the same time as when it was devoid of an inclination (*zamān 'adīm al-ma'il*) along the same distance. [This is] because motion increases in speed in proportion to the decreasing of inclined force (*al-quwwah al-mailiyyah*) within the body. [This is] because if some power within the body were to be decreased without increasing speed, the inclined force could not be an obstacle for motion. This is absurd.

Therefore, it is clear that the body [which has] a slight inclination, and that which has no inclination, [27] are both equal in speed. This is impossible. This impossibility follows only from the assumption of motion [for] that body which has no inclination in it at all, or from the assumption of the inclination which has a proportion to the first inclination equal to the proportion of time of what is devoid of an inclination to the time of what has the first inclination. However, the assumption of the inclination with the mentioned proportion is possible. Therefore, this impossibility follows only from the assumption of motion of a body which has no inclination in it at all, and is therefore impossible. We also say that a celestial sphere does not have a principle of linear inclination in its nature, otherwise it would have one nature requiring two mutually incompatible effects, [and] this is absurd.

⁴⁹ i.e. the obstacle

⁵⁰ i.e. coercion

Chapter Four

A Celestial Sphere is not receptive of Generation (*al-kawn*), Corruption (*al-fasād*), Division (*al-kharq*), and Composition (*al-Itiyām*)

As for [the fact] that it⁵¹ is not receptive of generation and corruption, this is because it determines the directions, and nothing which determines the directions is receptive of generation [28] and corruption. As for the minor term⁵², its explanation has already been mentioned. As for the major term⁵³, everything that is receptive of generation and corruption has a natural place for its generated form. Its corrupted form also has another natural place. Since we have shown that every body has a natural place, and everything⁵⁴ whose nature is such is receptive of linear motion, because the generated form (*al-ṣūrah al-kā'inah*) either comes to be in a natural place or in an unnatural place. If it came to be in an unnatural place, then it would require a linear inclination towards its natural place. If it came to be in a natural place, then the corrupted form would have been [there] in an unnatural place before the corruption. Therefore it would require a linear inclination towards its natural place.

As for [the fact] that it is not receptive of division and composition, it is because that can also only come to be through linear motion. A celestial sphere is not receptive of linear motion, and is therefore, not receptive of division and composition.

[29] Chapter Five

A Celestial Sphere always Moves in a Circle

⁵¹ i.e. a celestial sphere

⁵² i.e. the former

⁵³ i.e. the latter

⁵⁴ i.e. all bodies

A celestial sphere always moves in a circle because continuous movement in time (*al-ḥarakah al-ḥāfiẓah li'l-zamān*) is [either] linear, or circular. It cannot be that it is linear because it⁵⁵ either goes to infinity, or returns⁵⁶. The former is impossible; otherwise it would imply the existence of an infinite dimension. The latter is impossible because if it returned, then it would reach a limit [where it would be] required to rest. [This is] because between each two linear movements is rest, because the inclination that causes the arrival at that point (*al-ma'il al-muwaṣṣil*) exists at the state of arrival (*hāl al-wuṣūl*), because it actually causes the arrival at the state of arrival. If it did not exist at the state of arrival it would be impossible to render the arrival. Whenever the inclination of arrival exists, there cannot occur in it an inclination requiring it to be not causing the arrival due to the fact that it is impossible for two contrary inclinations to exist together. Therefore the state, which has an inclination of arrival (*ma'il al-wuṣūl*), is not the state which [30] has an inclination of non-arrival (*ma'il lā wuṣūl*). Each of the two inclinations is momentary (*ānī*) because the arrival and its being not causing arrival are momentary . [This is] because if the state of arrival were [to exist] for some time or [if it were] divisible, then when a body is at one of its ends⁵⁷, it would not have arrived at the end. This is absurd. It is similar with the state of its becoming non arriving. If each one of them is momentary, there must be a time between the moments where a body does not move; otherwise it would follow that there were a succession of moments, and then, time would be composed of parts [which] cannot be further divided. From this, it would follow that the distance (*musāfah*) would be composed of indivisible parts in order that it correspond to motion. This is absurd.

Therefore know, that continuous motion in time is not linear. Hence it is circular. This motion⁵⁸ is continuous (*ghayr munqaṭi'ah*) otherwise this would imply

⁵⁵ i.e. linear movement

⁵⁶ i.e. it always moves forwards and backwards between certain limits

⁵⁷ namely, at the beginning of the period of arrival

⁵⁸ i.e. circular motion

the discontinuity of time. Therefore a celestial sphere always moves in a circle, [31] and this is what is sought.

Guide

When a grain is thrown upwards while a mountain is falling down, its movement eventually ends at a state of rest, but it is not obstructing the movement of the mountain because its⁵⁹ state of rest is momentary, and the movement of the mountain is transitory. Between them there is no obstruction.

Chapter Six

A Celestial Sphere moves Voluntarily

A celestial sphere moves voluntarily because its motion is by itself (*al-dhātiyyah*). If it were not voluntary (*irādiyyah*), then it would either be natural (*tabī'iyah*) or coercive (*qasriyyah*). It cannot be that it is natural because natural motion (*al-ḥarakah al-tabī'iyah*) is fleeing (*harab*) from a state of incompatibility (*ḥālat munāfirah*) and yearning (*ṭalab*) to a state of compatibility (*ḥālat mulā'imah*); but, in circular motion, this is impossible. As for [the fact] that it is not fleeing [from a state of incompatibility], this is so because every point from which a body with circular motion moves away is a point towards which its motion is directed. The fleeing [32] from a natural thing is impossible to be directed towards it⁶⁰. As for the fact that it⁶¹ does not seek a state of compatibility is because when natural [motion] connects a body through motion to the desired state, it brings the body to rest.

But circular motion is not as such. Circular motion cannot be coercive because coercive [motion] is opposed to natural [motion], and where there is no natural [motion] there is no coercive [motion either].

⁵⁹ i.e. the grain

⁶⁰ i.e. the point

⁶¹ i.e. circular motion

Chapter Seven

On Motive Power (*al-quwwah al-muḥarrikah*)

The motive power of a celestial sphere must necessarily be free from matter because the motive power of a celestial sphere causes by its power infinite actions and no corporeal power is as such. Therefore the mover of a celestial sphere is not a corporeal power. We have said that the corporeal power does not cause by its power infinite movements because every corporeal power is receptive of division. [33] Every power receptive of division is such that if a part of it causes by its power something, the whole causes all of these things; otherwise a part would be equal in effect to the whole. This is absurd. If it like that the whole does not have the power over infinite things, because a part of it either causes a finite whole from a certain beginning, or causes an infinite whole. The latter is false because the whole causes by its power that which is more. This would imply an increase of the well ordered infinite. This is absurd.

So know that a part causes a finite whole and another part similarly. Therefore, the whole does not cause an infinite because of the addition of a finite to a finite does not result in infinity. Therefore, it has been established that everything that is caused by a corporeal power is finite.

[34] Chapter Eight

On the Proximate Mover (*al-muḥarrik al-qarīb*) of a Celestial Sphere

The proximate mover of a celestial sphere is a corporeal power because causing a voluntary motion does not take place except by volition either based on a universal conception, or a particular one. The former is not possible because the relation of the universal conception to all particulars is at the same level. Therefore, it does not lead

to certain particular motions and not to others; otherwise there would be a preponderance without a preponderating principle. Hence, the principle of particular motions has particular conceptions, and that which has a particular conception is corporeal, for a particular form is impressed which is sometimes smaller and sometimes bigger. The differences between the small and the big are either due to the differences between the two forms in reality [35], or are due to the difference in big and small of that from which both forms are derived, or are due to their differences in the substrate of the perceiving subject. The first is not possible because we have spoken of two forms of the same species. The second is also not possible because a form, different in terms of smallness and bigness, is not necessarily derived from outside. Therefore, the third division has become incumbent. Hence, a big [form] is impressed upon something different from that upon which a small one is impressed; in which case the perceiving subject would undoubtedly be divided in position. And that, whose nature is such, is corporeal, and this is what we are looking for.

THE THIRD SCIENCE

ON THE ELEMENTS (*al-‘unṣuriyyāt*)

[This science] comprises six chapters.

Chapter One

On the Simple Elements (*al-basā’iṭ al-‘unṣuriyyāt*)⁶²

[The simple elements are] water (*al-mā’*), earth (*al-‘arḍ*), fire (*al-nār*), and air (*al-hawā’*); each of them differs from the other in its natural form, otherwise each one of them would naturally occupy the place of the other. The consequent is false, and

⁶² This chapter simply discusses the primary elements, however, a discussion on the formation of minerals from these elements is once again omitted for simplicity. The details of the study of this science is studied in specialized works, such as the related volume of the *Kitāb al-Shifā’*. But in chapter three below he briefly discusses the way in which minerals are formed. This is because his explanation of the formation of minerals is based on smoke and vapor which are subjects in meteorology.

therefore, [36] so too is the antecedent. Each of them is receptive of generation and corruption, because water turns into stone and the stone is dissolved into water; similarly, air turns into water, as is seen on the summits of the mountains because the air is condensed and becomes water that instantly drips. Water also turns into air by heating; similarly, air turns into fire as [is the case in] the furnace of the blacksmiths. Fire also turns into air as is observed in a lamp. We also say: the qualities are an addition to the natural form because it is impossible for qualities like heat and cold to remain together with the natural form. If they⁶³ were the very natural form then that would be impossible. When the simple elements come together in a composite, then they act upon one another through their contradictory capacities; the result is an intermediary quality (*kayfiyyah mutawassitah*) that lies in between the contradictory qualities, which is homogeneous over the parts. This is [37] mixture (*mizāj*).

Chapter Two

On Atmospheric Phenomena (*kā'ināt al-jaww*)

As for clouds (*al-sahāb*), rain (*al-maṭar*), and everything pertaining to them, the major cause of them is the condensation of particles of ascending vapor (*al-bukhār*). [This is] because the air which is proximate to water acquires the quality of coldness from the water. Furthermore, the stratum which is cut off from the influences of the rays of the sun remains cold, and when the vapor, in its ascending reaches it⁶⁴, it condenses by means of coldness. If the coldness is not intense [then] that⁶⁵ collects and forms drops. Therefore, the gathering is the clouds, and the dripping is the rain. If the coldness is intense, then the coldness either reaches the particles of the clouds before they have gathered, or it would not reach [the particles of the clouds before they gather]. If it reaches them before they gather [then] the [material of the] cloud

⁶³ i.e. the qualities

⁶⁴ i.e. that stratum

⁶⁵ i.e. the vapor

descends as snow. If it did not reach them [before they gather, then the material of the cloud] descends as hail (*barad*).

[38] As for [the fact that] if [the vapor] does not reach the cold stratum (*al-tibqah al-bāridah*), and if it is abundant, then it amasses as a cloud that produces rain (*siḥāb māṭir*). If it does not amass and is scanty it is called ‘fog’ (*dabāb*), and if coldness strikes it⁶⁶ and if it does not freeze, then it is [called] dew (*tall*); if it freezes, then it is [called] frost (*saqī’*).

As for thunder (*al-ra’d*) and lightning (*al-barq*), their cause is that if smoke (*al-dukhān*) rises and is blocked in between clouds, and the smoke cannot rise higher, then it severely fragments the cloud. Thus, a tremendous sound is produced due to its fragmentation, and this [sound] is the thunder. If the smoke ignites due to motion, then it [produces] lightning, and thunderbolts (*ṣā’iqah*).

As for wind (*al-riyāh*), it may be due [to the fact] that if the clouds are heavy, due to an abundance of coldness, [they] are propelled downward and become moving air; or it may be due to a propelling that happens, so that the cloud passes from one side towards another direction; [39] or it may be due to an expansion of air through rarefaction⁶⁷ (*takhalkhul*) in a certain direction; or it may be due to the cooling of ascending smoke so that it descends. Pertaining to wind, some kind of wind is burning hot wind (*sumūm muḥriq*) due to its being burnt by rays, or its passing over very hot land.

As for a rainbow (*qawsu quṣaḥa*), it originates from the reflection of brilliant light in round sprinkles [of water] particles (*ajzā’ rashshiyyah mustadīrah*). The difference in their colors is due to the variation of brilliant light and different colors of

⁶⁶ i.e. vapor

⁶⁷ or rarefaction

the clouds. As for a halo (*al-hālah*), it also originates from the reflection of brilliant light in round sprinkles [of water] particles.

As for shooting stars (*al-shuhub*), it is due to [the fact] that if smoke reaches the realm of fire, and is thin, fire is ignited in it, then it becomes fiery and flares up quickly so that it is seen as if floating.

As for an earthquake (*al-zalzalah*) and the gushing forth of springs (*infijār al-uyūn*), know that if vapor is retained [40] in the earth, it tends towards a certain direction and becomes cold as a result. Hence it⁶⁸ turns into water [which is] mixed with smoke particles, if it is a small quantity. Then if it is a large quantity, the splitting of the earth becomes necessary because the earth cannot contain it, and springs gush forth from it⁶⁹. If it becomes viscous, so that it cannot break through the channels of the earth, it collects and penetration is not possible for it. Then, it causes the earth to tremble.

Chapter Three

On Smoky (*al-adkhinah*) and Vaporous Minerals (*al-ma'ādin al-abkhariyyah*) that are Enclosed (*al-muhtabisah*) in the Earth⁷⁰

If they are not much, they would mix with different kinds of mixtures that are various in quantity and quality, and then the mineral bodies (*al-ajsām al-ma'daniyyah*) are generated from them. If vapor overwhelms smoke, jade (*al-yashm*), crystal (*al-billaur*), mercury (*al-zaybaq*), arsenic (*al-zarnīkh*), lead (*al-raṣāṣ*), and other transparent substances (*al-jawāhir al-mushaffah*) are generated. And if smoke overwhelms [vapor], salt (*al-milh*), vitriol (*al-zāj*), sulfur (*al-kibrīt*), and ammonia (*al-nūshādir*) are generated. Then from [41] the mixing of some of these with some

⁶⁸ i.e. vapor

⁶⁹ i.e. the earth

⁷⁰ This chapter, as we have indicated in footnote 63 above can be taken as al-Abhari's minerology albeit in extreme summary.

[others], earthly bodies (*al-ajsām al-arḍiyyah*) are generated, like gold (*al-dhahab*) and silver (*al-fiḍḍah*).

Chapter Four

On Plants (*al-nabāt*)

[Plants] have a faculty devoid of consciousness from which motions of plants in various dimensions, and in various actions through various organs could come forth; [this faculty] is called 'vegetable soul' (*nafs nabātiyyah*). It is the first entelechy (*kamāl awwal*) for natural organic bodies (*jism ṭabī'ī ālī*) in terms of reproduction, growth, and nourishment only. Therefore, they have a nutritive faculty (*quwwah ghādhīyyah*), which is the faculty that changes another body into a similitude of the body in which it⁷¹ is, so that it⁷² becomes attached to it⁷³, instead of being disengaged from it, through heat. And they have a faculty of growth (*quwwah nāmīyyah*), which adds to the body in which it is an addition in terms of dimensions namely, length, breadth, and depth, until it reaches perfection of growth in accordance with natural proportion.⁷⁴

They [also] have a reproductive faculty (*quwwah muwallidah*), [42] which takes something from the body in which it⁷⁵ is as a part and renders it⁷⁶ a matter and a principle for its like.

⁷¹ i.e. the nutritive faculty

⁷² i.e. the other body

⁷³ i.e. the body

⁷⁴ May also be read; and they have a faculty of growth which increases the dimensions of the body in which it is an addition, namely length, breadth, and depth until it reaches perfection of growth according to natural proportion.

⁷⁵ i.e. the reproductive faculty

⁷⁶ i.e. the part

The nutritive [faculty] attracts nutrition, seizes it, digests it, and gets rid of its residues. Therefore, it has four tasks; the power of attraction, seizure, digestion, and repulsion of residues.

[The faculty of] growth ceases to act first. The nutritive [faculty] remains active until it (i.e. the plant) becomes incapacitated, and then death befalls it.

Chapter Five

On Animals (*al-ḥayawān*)

These are characterized by the animal soul (*al-naḥs al-ḥayawāniyyah*). It is the first entelechy of a natural organic body in terms of perceiving corporeal particulars, and moving voluntarily. Hence it has a perceptive faculty (*quwwah mudrikah*), and a motive faculty (*quwwah muḥarrakah*).

As for the perceptive [faculty], it is either external (*al-zāhir*), or internal (*bāṭin*). As for the external, there are five; hearing (*al-samʿ*), sight (*al-baṣar*), smell (*al-shamm*), taste (*al-dhawq*), and touch (*al-lams*).

As for the internal, there are also five; [43] common sense⁷⁷ (*al-ḥiss al-mushtarak*), the faculty of imagination (*al-khayāl*), the faculty of estimation (*al-wahm*), the retentive faculty (*al-ḥāfiẓah*), and the cogitative faculty (*al-mutaṣarrifah*)⁷⁸.

- 1) Common sense. It is a faculty (*quwwah*) located in the front part of the first cavity in the brain. It receives all forms impressed on the external senses. These forms are other than [the forms of] sight; because we observe a falling droplet [of water] as a straight line, and a dot turning quickly as a circular line. They⁷⁹ are not impressed in sight because if sight only impresses that which is opposite it (i.e. sight), and that is the droplet and the dot, then, their impression (i.e. the straight and circular line) is in another faculty.

⁷⁷ i.e. *Sensus Communis*

⁷⁸ See *Ismāʿil Ankaravī on the Illuminative Philosophy*, Bilal Kuşpınar, (ISTAC-Kuala Lumpur 1996), 121.

⁷⁹ i.e. the straight and circular line

- 2) The [faculty of] imagination. It is a faculty located in the rear part of the first cavity. It preserves all forms of sensible objects and represents them after the senses are no longer in contact with the object (*al-ghaybūbah*). It is a repository of the common sense.
- 3) The [faculty of] estimation. [44] It is a faculty located in the posterior [part] of the middle cavity of the brain. It perceives particular meanings existing in sensible objects, as for instance, the faculty of judgment in sheep [to know] that the wolf should be avoided, and that it⁸⁰ should feel compassion towards the child.
- 4) The retentive [faculty]. It is a faculty located in the anterior [part] of the posterior cavity in the brain. It preserves everything [that] the estimative faculty (*al-quwwah al-wahmiyyah*) perceives from the particular meanings [which are] non-sensible objects existing in sensible objects. It is a repository of the estimative faculty.
- 5) The cogitative [faculty]. It is a faculty located in the middle ventricle of the brain. It is due to it that the composition as well as the separation of some things from some other things, which are in the [faculty of the] imagination or the retentive [faculty], takes place.

As for the motive faculty, it is divided into the stimulative [faculty] and the efficient [faculty].

- 1) Stimulative [faculty] (*bā'ithah*). It is a faculty which if a form, [45] desirable or to be avoided, is impressed in the imagination, it prompts the efficient [faculty] to start moving. If it prompts the efficient [faculty] to start moving, by which imagined things, [be they] harmful or useful are sought to produce pleasures, [then it] is called the appetitive faculty (*quwwah shahwāniyyah*). If it prompts the efficient [power] to start moving, by which the imagined thing, [be it] harmful or useful is repulsed, [then it] is called the faculty of irascibility (*quwwah ḡaḍabiyyah*)
- 2) Efficient [power] (*fā'ilah*). It is that which prepares the muscles to move.

Chapter Six

On Man (*al-insān*)

[Man] is characterized by the rational soul (*al-naḥs al-nātiqah*). It is the first entelechy (*kamāl*) of a natural organic body in terms of perceiving universal concepts, and performing acts of reflection. It has an intellective faculty (*quwwah 'āqilah*), by which concepts (*al-taṣawwūrāt*) and assents (*al-taṣḍiqāt*) are perceived; [46] and a practical faculty (*quwwah 'āmilah*) by which the body of man moves towards particular actions

⁸⁰ i.e. the sheep

- 2) The [faculty of] imagination. It is a faculty located in the rear part of the first cavity. It preserves all forms of sensible objects and represents them after the senses are no longer in contact with the object (*al-ghaybūbah*). It is a repository of the common sense.
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⁸⁰ i.e. the sheep

by reflection and vision, according to the requirement of the specific opinions pertaining to them.

The [rational] soul, with regard to the intellective faculty, has four ranks (*marātib*).

- 1) The first rank is free from all intelligibles (*al-ma'qūlāt*), but, it is predisposed to them. It⁸¹ is the material intellect (*al-'aql al-hayūlānī*).
- 2) The second rank. Self-evident intelligibles occur to it, and [the soul] is made ready to pass from the self-evident [intelligibles] to the theoretical [ones]. It is the intellectus inhabitus⁸² (*al-'aql bi'l malakah*).
- 3) The third rank is where intelligibles occur to it but does not expound on them in actuality, rather the information is repositied within it. It is the intellect in act (*al-'aql bi'l fi'l*).
- 4) The fourth rank is where its acquired intelligibles are expounded upon. It is the absolute intellect (*al-'aql al-muṭlaq*), and its intelligibles are called the acquired intellect (*'aql mustafād*). Furthermore, if the intellect inhabitus is predominant, it is called the sacred faculty (*quwwah qudsiyyah*).

Know that the intellective faculty is free [47] from matter, because if it were material then it would have a position. And therefore, it would either be indivisible or divisible. The former is not possible because everything that has a position is divisible according to what has been mentioned previously in the refutation of the particle. The latter is not possible because if its⁸³ intelligibles are simple, then their division would be necessary because the state in one of its parts would not be the state in another part. If they are a composite, [and since] every composite is composed of simples, then those simples would necessarily be divisible. This is absurd.

We also say that intellection (*al-ta'aqqul*) is not by means of a corporeal instrument, otherwise dullness⁸⁴ (*kalāl*) would occur to it due to the weakening of the body and that is not the case. [This is] because after [the age] of forty, the body begins to deteriorate while the rational faculty at that age [prepares] to attempt for perfection.

⁸¹ i.e. the first rank

⁸² i.e. habitual intellect

⁸³ i.e. the soul's

⁸⁴ or fatigue

We say that the rational souls (*al-nufūs al-nātiqah*) [48] are originated, because if they existed before the body, then the difference between them [would] either be by their quiddity and its inseparable attributes, or by their separable accidents.

It cannot be by their quiddity and its concomitants⁸⁵ because they are common, and that by which things have something in common is different from that by which things are different. It cannot be by its separable accidents because separable accidents are attached to something due to the receptacles (*al-qawābil*) because the quiddity does not in itself require accidents, otherwise accidents would be necessary. The receptacle (*al-qābil*) of the soul is the body. Therefore, when bodies do not exist, souls do not exist. Hence, [souls] are necessarily originated.⁸⁶

⁸⁵ i.e. its inseparable attributes

⁸⁶ With man the corporeal universe ends. As has been shown, there is a faculty, namely the intellect that connects him to the higher realms, namely, the celestial spheres. This implies that even physical astronomy should be discussed here. Since I have offered my comments concerning al-Abhari's arrangement of physics, I will not discuss it any further. Suffice it to say that one should already be able to recognize that the higher regions are the abode of the creator of the entire cosmic system, God. Hence, logically, metaphysics or rather "theology" (*ilāhiyyāt*) is the following system to be discussed as a science.

PART III - METAPHYSICS (*al-Ilāhiyyāt*)

The third part is on Metaphysics (*al-Ilāhiyyāt*). It is arranged according to three sciences (*funūn*).¹

[49] THE FIRST SCIENCE

ON THE DIVISIONS OF BEING (*Taqāsīm al-Wujūd*)

This science is arranged according to seven chapters.

Chapter One

On the Universal (*al-Kullīyy*) and the Particular (*al-Juz'īyy*)

As for the universal, it is not one in number, otherwise something one in number would itself be described by contrary accidents (*al-a'rāḍ al-mutaḍāddah*), like it being [both] black and white, this is absurd. Rather, it² is an intelligible meaning (*ma'nā ma'qūl*) in the soul which can be applied to each of [50] its particulars in external reality (*al-khārij*) in accordance with that meaning in the soul. If it existed in any one of the [external] individuals, then it³ would be that individual itself without difference at all.

As for the particular, it is specified through its individual specific properties that are additional to the universal nature; because the very conception of every universal (*kullīyy*) in so far as it is a universal, [occurs] without preventing many

¹ The arrangement of the sub-branches of metaphysics is also not systematic, rather it is arranged according to how the subject gives rise to a related topic. If we consider the topics discussed in these sub-branches we may say that the section on metaphysics may be subdivided into three sciences; ontology, theology and psychology of the intellect. But we find the discussion concerning causality under ontology, and the discussion concerning angels as heavenly intellects under psychology of the intellect. Psychology as a branch of physics is different from psychology as a branch of metaphysics, and the difference becomes clear in this discussion. In the former instance it discusses the concept of soul in general, whereas in the latter instance only the rational soul in relation to the heavenly intellects is discussed in addition to the psychology of the heavens.

² i.e. the universal

³ i.e. the intelligible meaning

[things] from participation, and the individual [exists] in so far as it prevents [many] from participation therefore individuation is an addition to the universal nature.

Chapter Two

On the One (*al-wāḥid*) and the Many (*al-kathīr*)

As for the one, it is said of that which cannot be divided, in so far as it is said to be one. [It is said to be one in any of the following:]

- 1) It may be [one] in genus (*al-jins*), as for instance, human and horse.
- 2) It may be [one] in species (*al-nawʿ*), [51] as for instance, Zayd and ʿUmar.
- 3) It may be [one] in predication⁴ (*al-maḥmūl*), as for instance cotton and snow.
- 4) It may be [one] in subject (*al-mawḍūʿ*), as for instance, writer and laughing [man].
- 5) It may be one in number.
- 6) It may not be real.
- 7) It may be [one] in continuity (*al-ittiṣāl*); that is something which is divisible in potentiality into homogeneous parts (*ʿajzāʾ mutashābihah*), as for instance, water.
- 8) It may be [one] in composition (*al-tarkīb*) which has multiplicity in actuality, as for instance, a house.
- 9) It may be really [one], and that is what cannot be divided at all.

As for the many, it is that which is receptive of the one.

Guide

Two things may oppose each other, namely when they cannot coexist in one thing at the same time. [52] It has four divisions.

- 1) Contraries (*al-ḍiddān*). Both exist but are not without correlatives (*al-mutaḍāyifān*), as for instance, blackness (*al-suwād*) and whiteness (*al-bayāḍ*).
- 2) Correlatives . They exist while each of them may be conceived in relation to the other, as for instance, paternity (*al-ubūwah*) and filiation (*al-bunūwah*).

⁴ i.e. by what is predicated; namely: they are both white

- 3) Things that are opposed due to privation (*'adam*) and possession (*al-milkah*). They are things where one pertains to existence while the other one pertains to non-existence, however, the subject in both is considered to be receptive of that existence, as for instance vision and blindness, and knowledge and ignorance.
- 4) Things that are opposed in terms of affirmation and negation (*al-mutaqābilān bi'l iḡāb wa'l-salb*), as for instance, horseness (*al-farsiyyah*) and non-horseness (*al-lā-farsiyyah*). This exists [only] in the mind not in concrete existence (*al-wujūd al-'aīnī*).

Chapter Three

On The Prior (*al-mutaqaddim*) and The Posterior (*al-muta'akhkhir*)

As for the prior , it is said in reference to five things.

- 1) The prior in time (*al-mutaqaddim bi'l-zamān*), this is obvious.
- 2) [53] The prior by nature (*al-mutaqaddim bi'l-ṭab'a*). It is that where the posterior cannot exist except when the prior exists together with it, while the prior may exist without the other⁵ existing, as for instance, the priority of [the number] one to [the number] two.
- 3) The prior in excellence (*al-mutaqaddim bi'l-sharf*), as for instance, the priority of Abū Bakr to 'Umar, may Allah the Supreme be pleased with them both.
- 4) The prior in rank (*al-mutaqaddim bi'l-rutbah*). It is that which is nearest to a determined beginning, as for instance, the arrangement of rows in the mosque relative to the prayer niche.
- 5) The prior through causality (*al-mutaqaddim bi'l-'illiyyah*), as for instance, movement of the hand to the movement of the pen.

As for the posterior, it is said of that which opposes the prior.

Chapter Four

On the Eternal (*al-qadīm*) and the Originated (*al-ḥādith*)

The eternal in essence (*al-qadīm bi'l dhāt*) is that whose existence does not come from something else. The eternal in time (*al-qadīm bi'l-zamān*) is that whose time has no beginning. The originated in essence (*al-muḥdath bi'l dhāt*) [54] is that whose existence is from something else. The originated in time (*al-muḥdath bi'l-zamān*) is

⁵ i.e. the posterior

that whose time has a beginning . There was a time when it⁶ did not exist, then that time elapsed and a time came to pass when it did exist. Every originated is temporal (*zamānī*) for it is preceded by matter (*māddah*) and a period of time (*muddah*), because the possibility of its existence precedes its existence; otherwise it would not have been possible before it, and then has become possible. Then it would follow, that a thing is transformed from essential impossibility (*al-imtinā' al-dhātī*) to essential possibility (*al-imkān al-dhātī*), and this is absurd.

This possibility is an existential matter (*amr wujūdī*) because there is no difference between when we say it is possible, and when we say [55] it is impossible. If it were a non-existent, the possible would not have been possible, this is absurd. The possibility is either self-subsistent (*qā'im binafsihī*) or not. It cannot be self-subsistent because the possibility of existence always occurs in relation to that which has the possibility of existence, and therefore is not self-subsistent but rather subsists in a substratum, and that is matter.

Chapter Five

On Potentiality (*al-quwwah*) and Actuality (*al-fi'l*)

Potentiality is something which is the principle of transformation into another in so far as it is another. All effects and acts arising from bodies in a habitual, continuous, and perceptible way as they are characterized in terms of where, how, motion, and rest, are in fact coming forth from a potentiality that exists in them⁷; for that⁸ may either be due to its being a body, or due to matters of chance, or due to a potentiality existing in it. The first is false, otherwise [56] all bodies would partake of it. The second is also false, otherwise that⁹ would not occur always, or most of the time because matters of

⁶ i.e. the originated in time

⁷ i.e. the bodies

⁸ i.e. the emanation of the effects

⁹ i.e. the effects

chance are neither perpetual nor occur most of the time. Therefore, it¹⁰ is from a potentiality existing in it¹¹, and this is what is sought.

Chapter Six

On Cause (*al-'illah*) and Effect (*al-ma'lul*)

A cause is said of everything having existence in itself, so that from its existence results another existence. A cause has four divisions:

- 1) The material cause (*al-'illat al-māddiyyah*) is that which is part of the effect but the effect does not necessarily exist in actuality through it, as for instance, the clay in relation to the clay pot.
- 2) The formal cause (*al-'illat al-ṣūriyyah*) is that which is part the effect but the effect necessarily exists in actuality through it, as for instance, the form in relation to the clay pot.
- 3) [57] The efficient cause (*al-'illat al-fā'iliyyah*) is that due to which the effect exists, as for instance, the maker in relation to the clay pot.
- 4) The final cause (*al-'illat al-ghā'iyyah*) is that for which the effect exists, as for instance, the intended purpose of the clay pot.

Furthermore, when the efficient cause is simple (*basīṭah*) it is impossible that more than one thing comes from it, because that from which two effects come forth is composite (*murakkab*), for being the [one] thing insofar as this effect emanates from it is different from its being [one] insofar as that [other] effect emanates from it. Therefore, if both of these two notions¹², or one of them, are included in the essence of the source, then the latter would necessarily be composed in its essence. If they are external, then it would be a source for both of them; but its being a source of that, is different from its being a source of the other. Therefore, it undoubtedly ends [58] in that which necessitates composition and plurality in the essence.

¹⁰ i.e. the emanation of effects

¹¹ i.e. the body

¹² i.e. effects

We are also saying that the existence of the effect becomes necessary when its complete cause exists, namely when all the things considered [necessary] for its actualization are actualized. [This is] because if it were not necessary of existence, then it would either be impossible of existence, which is impossible, otherwise it would not exist, or it would be possible of existence, in which case it would need a preponderating principle (*murajjih*) which brings it out from potentiality to actuality. Then all the things considered [necessary] for its existence would not occur, whereas we have already assumed them to occur. This is absurd. Hence, it has become clear that the existence of the effect becomes necessary when the complete cause is actualized. Therefore, it is necessary through something other than itself but it is possible in itself, because if we were to consider its quiddity insofar as it is this quiddity, it is not necessary for it to have [59] existence nor nonexistence.

Guide

The existence of something does not negate the effect of the cause upon it, because if the thing is nonexistent and then exists, then the cause is either described by its being an agent of its existence at the state of nonexistence, or at the state of existence, or at both states together. It¹³ cannot bring it¹⁴ into existence at the state of nonexistence, or at both states together, otherwise [it would follow that] existence and nonexistence are conjoined. This is absurd. So therefore, it is brought into existence at the state of its obtained existence [from the cause]. Hence, the fact that a thing exists does not negate its being an effect.

¹³ i.e. the cause

¹⁴ i.e. the thing

Chapter Seven

On Substance (*al-jawhar*) and Accident (*al-'araḍ*)

Every existent (*mawjūd*) is either specified by something inhering in it or is not. In the first case [60] the inhering (*al-sārī*) is called the dweller (*hāll*), and that in which it inheres is called the substratum (*maḥall*). Each of them necessarily needs the other, otherwise such an indwelling cannot occur. Either the substratum needs the dweller, in which case the substratum is called 'prime matter' (*al-ḥayūlā*) and the dweller is called 'form' (*al-ṣūrah*); or the converse occurs,¹⁵ in which case the substratum is called 'subject' (*mawdū'*) and the dweller [is called] 'accident' (*'araḍ*). If this has been established, then we say that substance is that quiddity (*al-māhiyyah*), which if it exists in concrete things it is not in a subject. Then, the Necessarily Existent is excluded from it¹⁶ because He has no quiddity other than existence. Accident is what exists in a subject.

Furthermore, if substance is a substratum then it is prime matter; and if it is a dweller then it is form. If it is neither dweller nor [61] substratum but a composition of both, then it is a body (*al-jism*). If this is not the case¹⁷ but is connected to bodies [in the sense of] governing and controlling, then it is soul (*al-nafs*), otherwise it is intellect (*al-'aql*). Substance is not a genus (*jins*) of these five divisions because if it were a genus, then that which is included under it would be composed of a genus and differentia (*faṣl*). But this is not the case because the soul is not composed of the two because it intellects simple quiddity (*al-māhiyyah al-baṣīṭah*) and therefore, is not composed, otherwise it would imply that the simple quiddity within it is divided, and this is absurd.

¹⁵ i.e. the dweller is in need of the substratum

¹⁶ i.e. from substance

¹⁷ i.e. not a composition of both

As for the divisions of accident, there are nine; quantity (*al-kamm*), quality (*al-kaif*), place (*al-ayna*), time (*al-matā*), relation (*al-iḍāfah*), possession (*al-milk*), position (*al-wadʿ*), action (*al-fiʿl*), and passion (*al-infiʿāl*).

Quantity is that which is in itself receptive of equality and inequality. It is divided into:

- 1) Discrete quantity (*al-kamm al-munfaṣil*), as for instance, [integral] numbers.
- 2) [62] Unchanging continuous quantity (*al-kamm al-muttaṣil qārr al-dhāt*) which is a measure, as for instance, a line, a surface, and volume.
- 3) Ever-changing continuous quantity (*al-kamm al-muttaṣil ḡhayr qārr al-dhāt*) which is time (*al-zamān*; i.e. past, present, and future).

As for quality, it is a condition in a thing which in itself does not require division nor relation. It is divided into:

- 1) The sensible qualities (*kaifiyyāt maḥsūṣah*), which are [either] permanent (*rāsikhah*), as for instance, the sweetness of honey and the saltiness of sea water, or transitory (*ḡhayr rāsikhah*), as for instance, redness [of the face due to] embarrassment and paleness [of the face due to] fear.
- 2) The qualities of the soul (*kaifiyyāt naḥsāniyyah*), which are [either] states (*ḥālāt*), as for instance, writing as an innate [quality] or abilities (*malakāt*) such as [the capability] of writing after perfecting and learning, and so on.
- 3) Qualities of capacity (*kaifiyyāt istiʿdādiyyah*) [which is] either resistance, as for instance, hardness, or passivity, as for instance, softness.
- 4) Quantitative qualities (*kaifiyyāt mukhtaṣṣah biʾl-kammiyyāt*), as for instance, triangularity (*al-muthallathīyyah*), rectangularity (*al-murabbaʿiyyah*), evenness (*al-zawjiyyah*), and oddness (*al-fardiyyah*).

Place (*al-ayna*), it is a state acquired by a thing due to [63] its existence (*ḥuṣūl*) in a particular place (*al-makān*).

Time (*al-matā*), it is a state acquired by a thing due to its existence in a particular time (*al-zamān*).

Relation, it is a state of repeated relativity.

Possession, it is a state acquired by a thing due to that which surrounds it while it moves together with its motion, such as a man wearing a turban and a shirt.

Position, it is the condition that exists for a thing due the relation between its parts to one another, and due to their relation to external things, as for instance, standing and sitting.

Action, it is a state acquired by a thing due to its effect on others, as for instance, the cutter as long as it cuts.

Passion, it is a condition acquired by a thing due to its effect on other things, as for instance, what is heated as long as it is heated.

[64] THE SECOND SCIENCE

ON THE KNOWLEDGE OF THE CREATOR AND HIS ATTRIBUTES

This [science] comprises ten chapters.

Chapter One

On the Proof of [the Existence] of The Necessary in His Essence

He is the one who when considered in so far as He is Himself (*min haithu huwa huwa*), cannot be receptive of nonexistence. The proof of His [existence]: When we say that there cannot be, in existence, an existent [thing which is] necessary in itself, then it leads to impossibility. For all beings taken together in that case would be a single totality composed of individual beings (*āḥād*), each one of which is possible in itself and therefore, needs an external cause. Knowing this is self-evident (*badihī*). What exists outside the possible existents, is necessary in itself. Therefore, upon the supposition of nonexistence of the Necessarily Existent, the existence of the Necessarily Existent follows. But this is impossible. Hence, His existence is necessary.

Chapter Two

On the fact that the Existence of the Necessarily Existent is His very real Essence

[65] If His existence were an addition to His real essence, then it¹⁸ would be an accident of it¹⁹. If it is an accident of it, then His existence, insofar as He is Himself, would be in need of something else and would therefore be possible in itself, in which case He must have a cause. If that cause is His very real Essence, it would necessarily exist prior to His existing, because the cause that brings about a thing (*al-'illah al-mūjidah*) must precede the effect in existence, so the thing would exist before itself. This is absurd. If it is something other than His quiddity, then the necessary in itself would need something else for its existence, and this is impossible.

Chapter Three

On the fact that Necessity of His Existence and His Realization are His very Essence

As for the former, if the necessity of His existence were an addition to His real essence, then He would be a caused [being] in Himself. Unless the existence of the cause is necessary, it is impossible [66] for the effect to exist. That necessity [of the causes' existence] is the necessity by itself necessarily. The necessity of His existence would therefore be prior to Himself, but this is impossible.

As for the latter, if His realization were an addition to His real essence, then He would be an effect of Himself. Unless the cause is realized, He cannot exist. The realization would therefore be prior to Himself, which is impossible.

¹⁸ i.e. His existence

¹⁹ i.e. His reality

Chapter Four

On the Oneness (*tawhīd*) of the Necessarily Existent

If we were to assume two existents [as] both [being] necessarily existent, then they would have this necessary existence in common and would be distinguished by something through which distinction [is possible]. The distinction is either His complete real essence, or is not. The former is impossible because if the distinction were His complete real essence, then the necessary existence, which they share, would be external to the real essence of each of them, but this [67] is impossible since we have already shown, that the necessarily existent is the very real essence of the Necessarily Existent. The latter is also impossible because each one of the two in that case would be composed of that which they share, and of that by which they are distinguished. Since every composite needs something other than itself, He would be possible in Himself. [Therefore] this [argument] is [also] absurd.

Chapter Five

On the fact that Necessarily [Existent] by Himself is Necessary in Every Respect

The Necessarily [Existent] in Himself is necessary in every respect, that is to say that He does not have an anticipated state, because His Essence is sufficient for the attributes which belong to His Essence, and therefore, it is necessary in every respect. We are [merely] saying that His Essence is sufficient for His attributes because if it²⁰ were insufficient, then something from His attributes would be from something else. Then the presence of that something else would be a complete cause for the existence of that attribute, and its absence would be a cause for its²¹ nonexistence.

²⁰ i.e. the essence

²¹ i.e. that attribute's

If it were so, then His Essence considered insofar as it is itself [68] unconditionally would not exist necessarily. For His Essence is either necessary together with the existence of that attribute, or [is necessary] together with its²² nonexistence. [This is] because the necessity²³ together with the existence of that attribute cannot exist due to something other than Him²⁴. If it²⁵ were together with its²⁶ nonexistence, its²⁷ nonexistence cannot be due to its absence²⁸. If its²⁹ existence were not necessary *unconditionally*, the Necessary would not be necessary in Himself. This is absurd.

Chapter Six

On the fact that Contingent Beings do not Partake in the Existence of the Necessarily
[Existent] in Himself

If there were a participation of contingents in His existence, then absolute existence as such, is either necessarily an abstraction, or a non-abstraction, or is not necessarily either. If abstraction were necessary for it, then the existence of the contingents entirely would be necessary as an abstraction, and not accidental to the quiddities. This is impossible, because we may intellect a heptagon although we may doubt its external existence. [69] Therefore, if its existence were its very real essence, then the same thing would be both known and doubted at the same time, and this is impossible. If non-abstraction were necessary for it, then the existence of The Sublime Creator would be an abstraction. This is absurd. If it is not necessarily either, then each of them would be possible for it, and therefore, would be an effect of a cause; and therefore, it would entail the need of the Necessarily Existent in His abstraction for

²² i.e. that attribute's

²³ i.e. the necessity of the existence of the Necessary

²⁴ i.e. from something other than the Necessary

²⁵ i.e. the necessity of the existence of the Necessary

²⁶ i.e. the attribute's

²⁷ i.e. the attribute's

²⁸ i.e. from the nonexistence of that something other than the Necessary

²⁹ i.e. the Essence of the Necessary

something other than Himself. Hence His Essence becomes insufficient for His attributes belonging to His Essence. This is absurd.

Chapter Seven

On the fact that the Necessarily [Existent] in Himself Knows His Essence

[This is] because He is free from matter. Everything free from matter is a perceiver (*mudrik*). Therefore He knows His Essence because His Essence is already with Him [in Reality]. Therefore, He knows His Essence because knowledge is the perceivers acquisition of the essence (*ḥaqīqah*) of a thing, [and that essence is] free from matter and its³⁰ appendages with the perceiver. [70] Therefore, The Creator knows His essence.

Guide

The intellection of a thing by itself does not entail a difference between that which is intellecting (*al-‘āqil*) and that which is intellected (*al-ma‘qūl*), because knowledge is the presence of the essence of a thing abstracted [from matter]. This is more general than the presence of the real essence of a thing different [from the intellect]. The falsity of the more particular does not necessitate the falsity of the more general because everyone intellects himself in himself, otherwise there would be a duality³¹ in everyone one of them intellecting and the other one is the intelligible. This is absurd.

Chapter Eight

On the fact that the Necessarily [Existent] in Himself Knows Universals

³⁰ i.e. matter's

³¹ or two souls

[This is] because He is free from matter and its appendages. Everything free from matter and its appendages necessarily knows universals. As for the minor [premise], we have already mentioned it. As for the major [premise], it is in general possible that every abstract may be intellected, and this [71] is evident and not concealed. Everything that is possible to be thought of by itself is certainly possible to be thought of together with each of the intelligibles (*al-ma'qūlāt*). Therefore it is possible to associate it with the other intelligibles in the soul, because perception and intellection are presence of the forms of the intelligibles in the mind, free from matter and its appendages. Everything that may possibly be associated with all intelligibles in the mind, may also be possibly associated with all intelligibles in themselves. Everything that is possible for the Necessarily Existent in general is necessarily existent for Him, otherwise He would have an anticipated state. This is absurd.

Objection: If the Sublime Creator were to know a thing, then He would be the efficient [cause] of that form and would be receptive of it, but this is impossible because the receiver is that which is prepared to receive the thing, while the efficient [cause] is that which does that thing [72] The former is different from the latter, and therefore this would imply composition.

We reply [to the question]: Why [is it that] one thing cannot be prepared to receive the conceptual thing (*al-shay' al-taṣawwūrī*) and be at the same time its agent? For being prepared to receive a thing means that it does not, in itself, prevent its³² conception; and its being an efficient [cause] means that it precedes that conception in causality. Therefore, you are not saying that both [meanings] are contradictory. Whosoever believes that God's knowledge of things is His very essence, has believed the denial of knowledge of essences.

³² i.e. the thing's

Chapter Nine

On the fact that the Necessarily [Existent] in Himself Knows Changing Particulars in a Universal Manner

[This is] because He knows their³³ causes in a complete manner. Therefore He necessarily knows them. For whosoever knows the cause in a complete manner, knows necessarily what follows from it³⁴ in itself; otherwise he would not know it³⁵. However, he does not perceive them in their change otherwise he would sometimes perceive them as [73] existent, not nonexistent, and sometimes as a nonexistent, not existing. Each of the two has a separate mental form. One of the two forms does not endure with the second, so that the Necessarily Existent would change in His Essence. This is absurd.

However, He knows [particulars] in a universal manner, just as you know a particular eclipse as it is, by saying about it that it is an eclipse that occurs after the movement of such and such a star from a northern direction with such and such characteristics, and so on to all the characteristics (*'awāriḍ*) [of an eclipse]. But you do not know it as a particular [eclipse], for nothing prevents you to apply what you know from applying judgment upon many cases. This universal knowledge is not sufficient to know the existence of that particular eclipse at that particular time so long as it is not sighted by the eye. Therefore, since nothing other than what we have cited results concerning God's knowledge, then, He knows particulars in a universal manner.

³³ i.e. particulars

³⁴ i.e. the cause

³⁵ i.e. the cause

[74] Chapter Ten

On the fact that The Necessarily [Existent] is the Willer (*murīd*) and Munificent Provider (*jawād*) of things

As for His will, everything that is known by the [First] Principle - which is good and compatible with His quiddity - emanates from the essence of the [First] Principle. His perfection is the requirement of this emanation. Therefore, that thing is pleasing to Him. This is His Will (*al-irādah*). As for His munificence, we say of the Necessarily [Existent] in Himself, that He either acts with a purpose and yearning towards perfection, or [that He] acts because He is the order of goodness in existence, and therefore, brings into existence things according to how they ought to be, not according to an intention and desire. The first [alternative] is impossible, as we have shown because the Necessarily Existent does not have an anticipated [state] of perfection. The second part is true, therefore, He is the Munificent Provider.

THE THIRD SCIENCE

ON THE ANGELS

They are immaterial intellects (*al-'uqūl al-mujarradah*), and [this part] comprises four chapters.

Chapter One

On the Proof of the Intellect

Its proof: That which has emanated [75] from the First Principle (*al-mabdā' al-awwal*) is one because He is simple. Only one can emanate from the simple, as we

have mentioned previously, and that one is either prime matter (*hayūlā*), a form (*ṣūrah*), an accident (*‘araḍ*), a soul (*nafs*), or an intellect (*‘aql*). It³⁶ cannot be prime matter because it cannot be constituted in actuality without a form; nor can it be a form because it³⁷ cannot precede prime matter in causality as we have mentioned previously. It cannot be an accident [either] because of the impossibility of its existence prior to the existence of the substance; nor can it be a soul, otherwise there would be an agent prior to the existence of the body (*al-jism*), and this is impossible because the soul is that which acts by means of bodies. Therefore if it has been proven that it is an intelligence, and this is what is sought.

Chapter Two

On the Proof of the Multiplicity of Intellects

Its proof: That which acts (*al-mu‘aththir*) upon the celestial spheres (*al-aflāk*) is either [76] one intellect (*‘aql wāḥid*), one celestial sphere (*falak wāḥid*), or multiple intellects (*‘uqūl mutakaththirah*). It cannot be one intellect because of the impossibility of all the celestial spheres emanating from one intellect, since we have shown that only one emanates from one. It cannot be the second because if a celestial sphere were the cause for another celestial sphere then that which contains (*al-ḥāwī*) would either be the cause for the existence of the contained (*al-maḥwā*) or vice versa³⁸.

It cannot possibly be the second because it is the baser (*akhass*) and the smaller (*aṣghar*) and it is impossible for the baser and the smaller (*al-akhass al-aṣghar*) to be the cause of the nobler and the more sublime (*al-ashraf al-a‘zam*). That which contains (*al-ḥāwī*) cannot be the cause of the existence of the contained (*al-maḥwā*), for if it were so³⁹, then the necessity of the existence of the effect (*al-ma‘lūl*)

³⁶ i.e. the second principle

³⁷ i.e. the form

³⁸ i.e. that the contained is the cause for that which contains

³⁹ i.e. if that which contains were the cause for the existence of the contained

would be posterior to the necessity of the existence of that which contains, because the necessity of the existence of the effect is posterior to the necessity of the existence of the cause (*al-‘illah*).

If this is so⁴⁰, then the nonexistence of the contained together with the existence [77] of that which contains is not impossible in itself; otherwise its⁴¹ existence together with it⁴² would not be posterior to it⁴³. This is absurd, for [indeed] we have assumed it⁴⁴ to be posterior [to that which contains].

And if the nonexistence of the contained together with the existence of that which contains is possible, [then] the existence of void (*al-khalā’*) would be possible in itself, and this is absurd. It is clear then, that that which acts upon celestial spheres is multiple intellects.

Guide

That which contains and the cause (*sabab*) of the contained, namely the second intellect, are together. The cause (*sabab*) is prior to the thing contained but that which contains is not prior because the cause is prior in causality (*al-‘illiyah*) and what is together with what is prior in causality may not necessarily be prior in causality.

Guide

That which contains and the contained are both possible in themselves but this does not necessitate void because does not follow from that, it follows from the conjunction of [both the] existence of that which contains and the nonexistence of the contained, and this is not possible.

⁴⁰ i.e. if the necessity of the existence of the necessity of the contained occurs later than the existence of that which contains

⁴¹ i.e. the contained

⁴² i.e. that which contains

⁴³ i.e. the contained

⁴⁴ i.e. the contained

[78] Chapter Three

On the Pre-Eternity of the Intellects (*azaliyyat al-'uqūl*) and their Eternity
without End (*abadiyyat al-'uqūl*)

There are various aspect with regard to them being pre-eternal. The first is that the Necessarily Existent contains (*mustajma'*) all that necessarily comes from Him, through His influence upon His Effects; otherwise He would have an anticipated state, and this is absurd. Intellects also necessitate all that comes from them, through their influence upon one another. For everything which is possible for them, is produced by them in actuality, otherwise there would be something in them which would be originated. Everything that is originated is preceded by some matter, in which case they would be material, and this is absurd. It follows from this that they are pre-eternal, for the existence of the effect is necessary when the complete cause exists.

As for their eternity without end: If something in them were to cease to exist, then something concerning its existence would go out of existence. But in this case, the Sublime Creator, and something in the intellects would be receptive of change and origination. This is absurd.

Chapter Four

On How the Intellects Intermediate (*kayfiyyah tawassuṭ al-'uqūl*) [79] between
the Sublime Creator and the Physical World (*al-'ālam al-jusmānī*)

It has already been mentioned that the Necessarily Existent (*wājib al-wujūd*) is one and His first effect is pure intellect (*al-'aql al-maḥḍ*). The celestial spheres are the

effects of the intellects. However, the celestial spheres are multiple and therefore their principles are multiple.

We have already shown that only one can emanate from one. The first intellect (*al-'aql al-awwal*), from which emanates the highest celestial sphere (*al-falak al-a'zam*) containing multiplicity, not with respect to its emanation from the Necessarily Existent but rather with respect to the fact that it has a quiddity (*māhīyyah*) whose existence is possible in itself and whose existence is necessary due to its cause. This implies necessity of existence due to something other than it, and possibility of existence in itself. Through one of these two respects, it becomes the principle of the second intellect (*al-'aql al-thānī*), and through the other respect it becomes the principle of the highest celestial sphere.

[80] The noblest effect must be dependent upon an aspect which is the noblest of all aspects in the intellect. Therefore, insofar as it exists as something whose existence is necessary through something other than itself, it becomes the principle of the second intellect. And, insofar as it exists as something whose existence is possible in itself, it becomes the principle of the highest celestial sphere. In this way, from every intellect, an intellect and a celestial sphere emanate, and this continues in this way ending in the ninth intellect (*al-'aql al-tāsi'*). From it⁴⁵ emanates the celestial sphere of the moon (*falak al-qamar*) and the tenth intellect (*al-'aql al-'āshir*), which is the principle of the governing emanator (*al-fayyāḍ al-mudīr*) of what lies below the celestial sphere of the moon. It⁴⁶ is the Active Intellect (*al-'aql al-fa'āl*). From it emanates elemental prime matter (*al-hayūlā al-unṣuriyyah*) and diverse forms belonging to species (*al-ṣūrah al-naw'iyyah al-mukhtalifah*) on the condition of preparedness of prime matter. [81] But prime matter, with regard to the separate intellect (*al-'aql al-mufāriq*), is not prepared to receive the form; otherwise the

⁴⁵ i.e. the ninth intellect

⁴⁶ i.e. the tenth intellect

preparedness would never change, but its⁴⁷ preparedness is due to heavenly motions (*al-ḥarakāt al-samāwiyyah*).

Every originated being (*ḥādith*) is preceded by a condition which precedes the originated being because [all] originated motion (*al-ḥarakāt al-muḥdathah*) is found to be either perpetual (*dā'im*) or after the origination of another originated [being] (*ba'da ḥudūth ḥādith ākhar*). The former is not possible, otherwise it would imply the perpetuity of originated beings (*al-ḥawādith*). These originated beings are either all together (*ijtimā'*), or successive (*ta'āqub*). The former is not possible otherwise it would require togetherness of things having a successive arrangement in existence ad infinitum, and this is impossible. Therefore, before every motion is a motion, and before every originated being is an originated being without [there being] a first.

Objection: You did not say that the arrangement of an infinite number of things is impossible.

[82] [Answer]: We say, that if we were to take two wholes [such as lines], one of them from a designated beginning to infinity, and the other starting at one unit from that beginning, and we apply the second on the first⁴⁸ so that the first part of the second whole is opposite to the first part of the first [whole], and the second [part of the second whole is opposite to] the second [part of the first whole], and so on, then they either coincide until infinity, or the second is shorter than the first. The former is not possible; otherwise that which is more would be the same as that which is less in the number of units, [and] this is absurd. Therefore the second must be shorter, and so, the second whole is finite. The first exceeds the second in a finite number, and what exceeds something finite with a finite number must be finite.

CONCLUSION

⁴⁷ i.e. prime matter

⁴⁸ i.e. let them coincide

Guide

The soul, after the disintegration of the body, is either corrupted, is attached to another body by way of transmigration (*al-tanāsukh*), or remains [83] existing without an attachment. The first is not possible because the soul is not receptive of corruption otherwise it would have a thing receptive of corruption, and a thing corruptible in actuality. Because the corruptible in actuality is different from what is receptive of corruption, in which case, it⁴⁹ would be a composite. This⁵⁰ is absurd.

The second is [also] not possible because the souls are originated together with the origination of the bodies, as has been mentioned previously, and therefore, transmigration is impossible because a body suitable for a soul is sufficient for the emanation of the soul from its first principle. Hence, every body is suited so that a soul can be attached to it. If another soul attaches to it by way of transmigration, then two souls governing it would be attached to one body. This is impossible because each one of the rational beings is only aware by itself of a single soul, and so therefore, it becomes clear that the soul continues to [exist] after death without an attachment.

Guide

Pleasure (*al-ladhdhah*) [84] is the perception of what is favorable in so far as it is favorable; for example the sweet in relation to taste, and light in relation to sight. What is favorable to the rational soul is the perception of the intelligibles by being established in conceptualizing the First Truth (*al-ḥaqq al-awwal*) insofar as it⁵¹ becomes clear to it⁵², and [the perception that] it⁵³ is the Necessarily Existent in

⁴⁹ i.e. the soul

⁵⁰ i.e. that the soul is corrupted after the disintegration of the body

⁵¹ i.e. the First Truth

⁵² i.e. the rational soul

⁵³ i.e. the First Truth

Himself, in all His aspects, devoid of defects, the source of the emanations of goodness according to the most correct guiding principle⁵⁴.

Then comes the perception of what is ordered after it⁵⁵, namely the immaterial intellects (*al-‘uqūl al-mujarradah*), the celestial souls (*al-nufūs al-falakiyyah*), heavenly bodies (*al-ajrām al-samāwiyyah*), and the elemental beings (*al-kā’ināt al-‘unṣuriyyah*) so that the soul becomes a place in which all existent forms are impressed according to the order they have. This perception⁵⁶ occurs to it⁵⁷ also after death. Therefore, pleasure occurs after death.

We are saying that this perception occurs to it after death; [85] because the soul, in its intellecting, does not need a bodily instrument (*al-ālah al-jusdāniyyah*). Therefore, its intellecting occurs after death [because pleasure occurs to it after death]. The absence of its occurrence⁵⁸ in the state of attachment of the soul to the body is due to certain obstacles such as bodily preoccupations, and corporeal attachments.

Guide

Pain (*al-alam*) is the perception of what is incompatible insofar as it is incompatible. What is incompatible to the rational soul is a condition (*hay’ah*) contrary to perfection (*kamāl*). Therefore, if the soul is separated from the body, and conditions contrary to perfection are established in it, [then] what is incompatible insofar as it is incompatible is perceived, and then spiritual pain befalls it.

Guide

⁵⁴ Can also be read: It is the Necessarily Existent in Himself, in all His aspects, devoid of defects, the source of the emanations of goodness in the most proper way

⁵⁵ i.e. the First Truth becomes clear to the rational soul

⁵⁶ i.e. the perception of intelligibles

⁵⁷ i.e. the rational soul

⁵⁸ i.e. the occurrence of pleasure

When the perfect soul with the conceptions of the real essences of things and [through] demonstrative convictions is free [86] from corporeal attachments, it becomes attached to the sacred world (*al-‘ālam al- qudsī*) in the presence of the sublimity of the Lord of the worlds “in an assembly to truth in the presence of a Sovereign Omnipotent”⁵⁹. If freedom from corporeal attachments does not occur to it⁶⁰, but bodily conditions remain in it, then it is hindered from the union with happiness. Then, because of them⁶¹ [the soul] suffers a great suffering. However, this condition [of the soul] is not a concomitant condition, but rather [it is] an accidental condition [which is] not concomitant. The pain [that occurred due to it] vanishes.

Guide

When it is clear to pristine rational souls (*al-nufūs al-nātiqah al-sādhajah*) that that is their nature to perceive the perception of real essences through the acquisition of the unknown from the known, then it is necessary for them, through this acquisition, to yearn for perfection. When [the soul] is separated from the body [87] and does not have a reason for perfection and its means, [then] great pain befalls it. This [pain] is the spiritual pain of fire “kindled (to a blaze) the which doth mount (right) to the hearts”.⁶²

Guide

The rational souls which do not acquire knowledge and high rank, nor yearn for it, when [they become] separated from the body and are free from vile bodily conditions attain deliverance from punishment and salvation from pain. Therefore, stupidity is closer to deliverance than cleverness of the imperfect.

⁵⁹ 54/*Al-Qamar*, 55. Translation of the verse taken from Abdullah Yusuf Ali, *The Meaning of the Holy Qur’ān*, Amana Corporation 1994, p. 1395.

⁶⁰ i.e. the perfect soul

⁶¹ i.e. corporeal attachments

⁶² 104/*Al-Humazah*, 6-7. Translation of the verse taken from Abdullah Yusuf Ali, *The Meaning of the Holy Qur’ān*, Amana Corporation 1994, p. 1698.

On the other hand, if they⁶³ are not free from bodily conditions, they suffer from the loss of the body and remain in grief of prime matter, bound by the chains of attachments, and are therefore in agony and excruciating pain.

Whosoever wishes to closely study philosophy and inquire into the school of the philosophers, need only consult our book entitled 'the quintessence of secrets' (*zubdat al-asrār*).

⁶³ i.e. the rational souls

PART III

THE *HIDĀYAT AL-ḤIKMAH*

هداية الحكمة

أثير الدين المفضل ابن عمر الابهري

بسم الله الرحمن الرحيم. رب تمام بالخير

الحمد لله حق حمده و الصلوة على رسوله محمد و آله من بعده. و بعده
فهذه رسالة في المنتق امليتها لبعض الاخوان على سبيل الارتجال
مستعينا بالله تعالى ولي التوفيق و هو حسبنا و نعم الوكيل.

فصل . اللفظ اما دال بالمطابقة، و هو الذي تعتبر دلالة

بالنسبة الى تمام مسماه، كالانسان بالنسبة الى الحيوان الناطق، و اما
دال بالتضمن، و هو الذي تعتبر دلالة بالنسبة الى جزؤ المسمى،
كالانسان بالنسبة الى الناطق، و اما دال بالالتزام، و هو الذي تعتبر
دلالة بالنسبة الى لازم المسمى في الذهن، كالعمار بالنسبة الى البليد.

ثم الدال بالمطابقة اما مفرد و هو الذي لا يكون جزؤه دالا على
جزء معناه، و اما مؤلف و هو الذي يخالفه كرامي الحجارة. ثم المفرد اما
جزئي و هو الذي يكون نفسه مفهومه مانعاً من الشركة كزبد، و اما كلي
و هو الذي يخالفه.

و الكلي اما ذاتي و هو الذي لا يكون خارجاً عن حقيقة الجزئيات
التي تحته كالحيوان بالنسبة الى زيد و غيره، و اما عرضي و هو الذي
يخالفه كالكتاب و الضاحك للانسان.

ثم الذاتي اما جنس و هو الكلي المعقول على كثيرين مختلفين
بالحقائق في جواب ما هو كالحيوان بالنسبة الى الانسان و غيره. و ما لا
جنس فوقه يسمى جنس الاجناس

و اما الفصل و هو الكلي المقول على كثيرين متفقين في جواب

أي نوع هو كالناطق للانسان.

و اما نوع و هو الكلي المقول على كثيرين مختلفين بالعدد فقط كالانسان بالنسبة الى أحاده و قد يقال لفظه النوع على ما يدخل مع غيره تحت جنس قريب كالحیوان و النبات بالنسبة الى الجسم النامي، و يسمى نوعاً إضافياً. و ما لا نوع تحته من الانواع الاضافية يسمى نوع الانواع

و اما العرض فهو اما خاصة و هو الذي تختص بنوع واحد كالکاتب و الضاحك بالنسبة الى الانسان.

و اما عرضی عام و هو الذي يوجد في نوعين فصاعداً كالسواد النوم. و كل واحد من الخاصة و العرض العام اما لازم، و هو الذي لا ينفك عن الماهية. و اما مفارق و هو الذي تخالفه. مثل الخاصة اللازمة الضاحك بالقوة للانسان. و مثال الخاصة المفارقة الضاحك بالفعل للانسان مثل العرض العام اللازم الزوجية للاربعة. مثل العرض العام المفارق السواد للانسان.

فصل . المعرف للماهية اما حدٌ و اما رسم. و كل واحد منهما

اما تام و اما ناقص. اما الحد التام فهو القول الدال على حقيقة الشيء، فيجب ان يوضع فيه الجنس القريب، و يقترن به الفصل، كالحیوان الناطق في حد الانسان.

و اما الحد الناقص فهو الذي يتألف من جنس بعيد و فصل، او من عرض عام و فصل، كقولنا الجسم الناطق و الموجود في تعريف الانسان.

و اما الرسم التام فهو الذي يتألف من الجنس و الخاصة، كقولنا الحيوان الضاحك في تعريف الانسان.

و اما الرسم الناقص فهو الذي يتألف من جنسٍ بعيد و خاصة او من عرضٍ عام و خاصة، كقولنا الجسم الضاحك او الموجود الضاحك في تعريف الانسان

هداية . القضية قول يقال لقائله: انه صادق او كاذب. و هي

اما حملية، كقولنا زيد كاتب. و المحكوم عليه يسمى موضوعا و المحكوم به محمولاً.

و اما الشرطية متصلة كقولنا ان كانت الشمس طالعة فالنهار موجود. و الجزء الاول يسمى مقدما، و الثاني تاليا. و اما شرطية منفصلة، كقولنا العدد اما ان يكون زوجاً أو فرداً.

ثم الحملية اما موجبة و هي التي يحكم فيها بحصول شئ لشيء كما مر او اما سالبة و هي التي يحكم فيها بسلب شئ عن شئ، كقولنا زيد ليس بكاتب. و كل واحد من الموجبة والسالبة اما مخصوصة، و هي التي يكون موضوعها شخصاً معيناً، كقولنا زيد كاتب، بعض الانسان ليس بكاتب. و اما كلية كقولنا كل انسان حيوان، لا شئ من الانسان بحجر. و اما جزئية، كقولنا بعض الانسان كاتب، بعض الانسان ليس بكاتب. و اما مهمة كقولنا الانسان كاتب، الانسان ليس كاتب. و هي في قوة الجزئية لان الحكم في البعض يقين و في الكلي مشكوك، فأخذنا المعلوم، و قلنا المهمة في الجزئية.

و كل قضية جعل فيها حرف السلب جزءاً من المحمول او الموضوع

يسمى معدولة، كقولنا زيد هو ليس بكاتب. و ما ليس بمعدولة يسمى محصلة ان كانت موجبةً، و بسيطة ان كانت سالبة.

و الفرق بين الموجبة المعدولة و السالبة البسيطة بالرابطة فان الرابطة متى كانت متقدمة على حرف السلب كانت القضية موجبة معدولة و متى كانت متأخرة كانت القضية سالبة بسيطة

ثم القضية المحصورة لها شرائط في جانب الموضوع. فاننا اذا قلنا كل ج ب فلا نعنى به مجموعه، بل كل واحد منه، و لا نعنى به ما يكون ج بالفعل، و لا نعنى به ما يكون ج حال الحكم، بل ما يكون ج سواء كان حال الحكم او قبله او بعده، و لا نعنى به ما يكون ج لا دائماً او دائماً، بل ما يكون ج في الجملة.

ثم القضية تنقسم انقسام الجهات الى اقسام آخر. لان ثبوت المحمول للموضوع او سلبه عنه، اما ان يكون بالفعل او بالقوة او بما يعمهما. و الفعل اما ضروري او لا ضروري او مطلق.

اما الضروري فلا نعنى به الضروري بشرط الوصف كالحركة للكاتب، و لا ما يكون ضرورياً بحسب وقت، اما معين كالسوف للقمر، او غير معين كالتنفس للانسان. بل نعنى بها ما يكون ضرورياً بحسب دوام الذات، كقولنا بالضرورة كل انسان حيوان، و بالضرورة لا شئ من الانسان بحجر.

و اما اللاضرورة فيسمى وجودية، و هي التي يحكم فيها بثبوت المحمول للموضوع او سلبه عنه بالفعل لا بالضرورة، كقولنا كل انسان يتنفس لا بالضرورة و لا شئ من الانسان يتنفس لا بالضرورة.

و اما المطلقة فهي التي يحكم فيها بثبوت المحمول للموضوع او

سلبه عنه بالفعل من غير اعتبار قيد آخر، كقولنا كل انسان متنفس و لا شئ من الانسان بمتنفس و يسمى مطلقة عامة.

فاما القضية التي يحكم فيها بثبوت المحمول للموضوع او سلبه عنه بالقوة، فهي الممكنة الخاصة. اى التي يحكم فيها ان المحمول غير ضروري الوجود و العدم للموضوع، كقولنا كل انسان كاتب بالامكان الخاص، و لا شئ من الانسان بكاتب بالامكان الخاص.

و اما القضية التي يحكم فيها بما يعم القوة و الفعل فهي الممكنة العامة، اى التي يحكم فيها بارتفاع، اما عن جانب العدم او عن جانب الوجود، كقولنا كل انسان كاتب بالامكان العام، و لا شئ من الانسان بكاتب بالامكان العام.

و اما الشرطية المتصلة، فالموجبة منها ما يحكم فيها بحصول قضية عند اخرى، كقولنا ان كانت الشمس طالعة فالنهار موجود، و السالبة ما يحكم فيها بلا حصول قضية عند اخرى، كقولنا ليس ان كانت الشمس طالعة فالليل موجود.

و اما الموجبة اما لزومية و اما اتفاقية اما اللزومية فهي التي يحكم فيها بلزوم قضية عند اخرى، كقولنا ان كانت الشمس يلزم ان يكون النهار موجوداً.

و اما الاتفاقية فهي التي يحكم فيها بصحبة قضية عند اخرى، كقولنا ان كان الانسان ناطقاً يصحبه ان يكون الحمارنا حقاً.

و الكلية ما يكون الحكم في كل الاوقات، كقولنا كلما كانت الشمس طالعة فالنهار موجود، و ليس البتة اذا كانت الشمس طالعة فالليل موجود.

و الجزئية ما يحكم فيها في بعض الاوقات، كقولنا قد يكون اذا
جئتني اكرمك.

و اما الشرطية المنفصلة، فالموجبة منها ما يحكم فيها بالتعاند،
كقولنا ليس الانسان اما حيوان او ابيض.

ثم الموجبة اما حقيقية و اما مانعة الجمع او مانعة الخلو. و اما
الحقيقية فهي التي يحكم فيها بالتعاند ثبوتاً و انتفاء. و هي قد يكون
ذات جزئين كما مر و قد يكون ذات اجزاء كقولنا العدد اما زائد رم ناقص
او مساو.

و اما مانعة الجمع فهي التي يحكم فيها بالتعاند ثبوتاً فقط،
كقولنا هذا الشئ اما حجر او شجر. و اما مانعة الخلو فهي التي يحكم
منها بالتعاند انتفاء، كقولنا زيداً اما ان يكون في البحر و اما ان لا
تغرق.

و الكلية ما يحكم بالتعاند او عدمه في كل الاوقات. و الجزئية ما
يحكم فيها في بعض الاوقات.

هداية . القضيتان المتناقضتان هما المختلفتان بالسلب و

الايجاب على وجه يقتضى لذاته ان يكون احديهما صادقة و الاخرى كاذبة
و لا يتحقق التناقض بين المخصوصتين الا مع ثمانية شرائط:
وحدة المسند، و المسند اليه، و الاضافة، و الزمان، و المكان، و الشرط، و
القوة و الفعل، و الجزء و الكل. و يعتبر في تحقق التناقض بين
المحصورتين شرط تاسع، و هو الاختلاف بالكمية. لان الكليتين قد يكذبان،
كقولنا كل انسان كاتب، لا شئ من الانسان بكاتب. و الكليتين قد

يصدقان، كقولنا بعض الانسان كاتب، بعض الانسان ليس بكاتب.

نقيض الموجبة الكلية انما هي السالبة الجزئية، و نقيض السالبة

الكلية انما هي الموجبة الجزئية

هداية . عكس القضية ما يجعل موضوعها محمولاً و المحمولها

موضوعاً، مقدمها تالياً و تاليها مقدماً، مع بقاء السلب و الايجاب و

الصدق و الكذب بحاله.

و اما الحمليات فاعلم ان السالبة الضرورية منها مثل نفسها،

لانا اذا قلنا بالضرورة لا شئ من ب ج، كان معناه ان الجيم و الباء

يستحيل اجتماعهما، فيكون بالضرورة لا شئ من ج ب.

و اما السالبة الوجودية و المطلقة العامة و الممكنة الخاصة و

العامة فلا يجب لها العكس، لانه يصدق لا شئ من الانسان بمتنفس بهذه

الجهات، و لا يصدق لا شئ من المتنفس بانسان، لان بعض المتنفس

بالضرورة انسان

و اما الموجبة كلية كانت او جزئية، فلا يجب انعكاسها كلية. ان

يصدق كل انسان حيوان، و لا يصدق كل حيوان انسان بل ينعكس جزئية

في الكم.

اما في الجهة فالضرورية و الوجودية و المطلقة تنعكس مطلقة

عامة، لانه اذا صدق كل ج ب بهذه الجهات تجده موجوداً معيناً موصوفاً

كونه ج ب بالفعل، فيكون بعض ب ج بالفعل، مع انه يحتمل الضرورة و

اللاضرورة، و هي المطلقة العامة.

و اما الممكنة خاصة كان او عامة فتنعكس ممكنة عامة، لانه اذا

صدق كل ج ب او بعضه بالامكان الخاص او العام صدق بعض ب ج بالامكان العام. و الا بالضرورة لا شئ من ب ج بالضرورة، فلا شئ من ج ب، و قد كان كل ج ب او بعضه ب بالامكان الخاص او العام. هذا خلف.

اما السالبة الجزئية لا يجب لها العكس. لانه يصدق بعض الحيوان ليس بانسان، و لا يصدق بعض الانسان ليس بحيوان.

و اما الشرطية، المتصلة، فالسالبة منها ان كانت كلية فتنعكس كلية، و ان كانت جزئية فلا عكس لها.

و اما الموجبة، فان كانت كلية فتنعكس جزئية، و ان كانت جزئية فتنعكس ايضاً جزئية و البيان في الكل على الوجه المذكور في الحملات.

هداية . في القياس. و هو قول مؤلف من اقوال متى سلمت

لزم عنه اذاته قول آخر. و هو اما اقتتراني و هو الذي لا يكون عين النتيجة و لا نقيضها مذكوراً فيه بالفعل. كقولنا كل ج ب و كل ب ا و اما استثنائي و هو الذي يكون احدهما مذكوراً فيه بالفعل كقولنا ان كانت الشمس طالعة فالنهار موجود، لكن الشمس طالعة فالنهار موجود، لكن النهار ليس بموجود فالشمس ليس بطالعة.

و المتكرر في مقدمتي القياس الاقتتراني يسمى حداً اوسط، و الذي يكون محكوماً عليه في المطلوب يسمى حداً اصغر، و الذي يصير محكوماً به يسمى الحد الاكبر و المقدمة التي فيها الاصغر يسمى صغرى و التي فيها الاكبر يسمى كبرى و الهيئة الحاصلة من كيفية وضع الحد الاوسط عند الحدين الاخرين يسمى شكلاً. و تأليف الصغرى و الكبرى يسمى قرينة. و القرينة المنتجة لذاتها هي القياس.

ثم الاقتراضي اما ان يكون مقدمتاه حمليتن، او لا يكون. و القسوة
 الاول على اشكال اربعة. لان الحد الاوسط ان كان محمولاً في الصغرى
 موضوعاً في الكبرى فهو الشكل الاول و ان كان محمولاً فيهما فهو
 الشكل الثاني. و ان كان موضوعاً فيهما فهو الشكل الثالث و ان كان
 موضوعاً في الصغرى محمولاً في الكبرى فهو الشكل الرابع. و قد
 طرحوه لان الذهن لا تنفطن لقياسيته ، و الكلفة في استنتاجه اشد من
 استعمال المطلوب. و مع ذلك لا يلحق ايراده في المختصرات فيقتصر في
 هذه الرسالة على الاشكال الثلاثة

اما الشكل الاول فيشترط في انتاجه موجبية الصغرى و كون
 الكبرى كلية، فيكون الضروب المنتجة اربعة.

الاول من موجبتين كليتين ينتج موجبة كلية. مثاله كل ج ب و
 كل ب ا. فكل ج ا.

الثاني من كليتين و الكبرى سالبة، تنتج سالبة كلية. مثاله كل
 ج ب، و لا شئ من ب ا، فلا شئ من ج ا.

الثالث من موجبتين و الصغرى جزئية تنتج موجبة جزئية.
 مثاله بع ج ب، و كل ب ا، فبع ج ا.

الرابع من موجبة جزئية صغرى و سالبة كلية كبرى، تنتج
 سالبة جزئية. مثال بعض ج ب و لا شئ من ب ا، فبعض ج ليس ا.

و اما الشكل الثاني فيشترط في انتاجه اختلاف المقدمتين
 بالسلب و الايجاب و كون الكبرى كلية مع التعاند من جهتي المقدمتين. و
 الضروب المنتجة منه اربعة:

الاول من كليتين و الكبرى سالبة، تنتج كلية سالبة. كل ج ب، و

لا شيء من ا ب، فلا شيء من ج ا.

و الثاني من كليتين و الصغرى سالبة، تنتج سالبة كلية. لا شيء من ج ب، و كل ا ب، فلا شيء من ج ا.

الثالث من موجبة جزئية صغرى و سالبة كلية كبرى، تنتج سالبة جزئية بعض ج ب، و لا شيء من ا ب، فبعض ج ليس ا.

والرابع من سالبة جزئية صغرى و موجبة كلية كبرى، تنتج سالبة جزئية. بعض ج ليس ب، و كل ا ب، فبعض ج ليس ا.

و اما الشكل الثالث فيشترط في انتاجه موجبية الصغرى و كون احدى المقدمتين كلية، فيكون الضروب المنتجة فيه ستة:

الاول من موجبتين كليتين، تنتج موجبة جزئية. كل ج ا و كل ج ب، فبعض ا ب.

الثاني من كليتين ، لا كبرى سالبة، ينتج سالبة جزئية. كل ج ب و لا شيء من ج ا، فبعض ب ليس ا.

و الثالث من موجبتين و الصغرى جزئية، ينتج موجبة جزئية، بعض ج ب، و كل ج ا، فبعض ب ا.

الرابع من موجبة جزئية صغرى و سالبة كلية كبرى، تنتج سالبة جزئية. بعض ج ب، و لا شيء من ج ا، فبعض ب ليس ا.

الخامس من موجبتين و الكبرى جزئية، تنتج موجبة جزئية. كل ج ب، و بعض ج ا، فبعض ب ا.

و السادس من موجبة كلية صغرى و سالبة جزئية كبرى، تنتج سالبة جزئية. كل ج ب، و بعض ج ليس ا، فبعض ب ليس ا.

هداية . اعلم ان الصغرى في الشكل الاول متى كانت ضرورية

او وجودية او مطلقة عامة فالنتيجة تابعة الكبرى و متى كانت ممكنة خاصة او عامة فهي مع الضرورية تنتج ضرورية. لان الاوسط ان حصل بالفعل كانت النتيجة ضرورية. و اذا كانت ضرورية عند حصول امر ممكن كانت ضرورية في نفس الامر. و الا لزم انقلاب ما ليس بضروري ضرورياً، هذا خلف. و مع الوجودية و الممكنة الخاصة تنتج ممكنة خاصة. لان الممكن للممكن ممكن. و مع المطلقة و الممكنة العامتين تنتج ممكنة عامة، لان الكبرى ان صدقت كانت النتيجة ضرورية، و الا فالنتيجة ممكنة خاصة، و القدر المشترك انما هو الامكان العام.

و اما في الشكل الثاني فاعلم ان احدى المقدمتين من هذا الشكل متى كانت ضرورية فالنتيجة ضرورية. لان ضرورة الاوسط حاصلة لاحدى الطرفين بالضرورة و مسلوبة عن الطرف الآخر بالضرورة. فبين الطرفين مباينة ضرورية. و اما اختلاط المطلقة و الوجودية و الممكن بعضها في البعض فلا ينتج في هذا الشكل. لان المحمول الواحد جاز ان يكون حاصلة لشيء بهذه الجهات و مسلوباً عنه، مع انه لا سلب الشيء عن نفسه. كقولنا كل انسان متنفس بهذه الجهات، و لا شيء من الانسان بمتنفس بهذه الجهات، مع انه لا ينتج لا شيء من الانسان بانسان. و اما الشكل الثالث فجهات نتايجها كما في الاول.

القسم الثاني من القياس الاقتراني، و هو الذي لا يكون مقدماته حمليتين. و هو اما ان يتألف عن متصلتين، او منفصلتين، او حملى و منفصل، او متصل و منفصل. مثال الاول كلما كانت الشمس طالعة

فالنهار موجود، و كلما كان النهار موجوداً فالارض مضيئة، فكلما كانت الشمس طالعة فالارض مضيئة. مثال الثاني كل جسو اما فلكي او عنصري، و كل عنصري اما ثقيل او خفيف، فكل جسم اما ثقيل او خفيف او فلكي، مثال الثالث كلما كان هذا انساناً فهو حيوان، و كل حيوان جسم، فكلما كانا هذا انساناً فهو جسم. مثال الرابع كل عدد اما زوج و اما فرد، و كل زوج فهو ينقسم بمتساويين، فكل عدد اما متقسم بمتساويين او فرد. مثال الخامس كلما كان هذا انساناً فهو حيوان، و كل حيوان اما طويل او قصير، فكلما كان هذا انساناً فهو اما طويل او قصير. فهذا هو القول في الاقتрани.

و اما القياس الاستثنائي فالقضية الموضوعة فيه اما منفصلة او متصلة. فان كانت متصلة فاستثناء عين المقدم تنتج عين التالي و استثناء نقيض التالي تنتج نقيض المقدم. و اما استثناء عين التالي و نقيض المقدم فلا ينتج.

و ان كانت منفصلة فاما ان يكون حقيقية اما مانعة الجمع او مانعة الخلو فان كانت حقيقية فاما ان يكون ذات جزئين، فاستثناء عين ايهما كان ينتج نقيض التالي، و استثناء نقيض ايهما كان ينتج عين التالي. و ان كانت ذات اجزاء، فاستثناء عين احدهما ينتج نقيض البواقي، و استثناء نقيض احدهما ينتج منفصلة مركبة من بواقي الاجزاء.

و ان كانت مانعة الجمع، فاستثناء عين احدهما ينتج نقيض الاخر. و اما استثناء نقيض ايهما كان فلا ينتج.

و ان كانت مانعة الخلو فاستثناء نقيض ايهما كان ينتج عين

الآخر و استثناء عين احدهما فلا ينتج شيئاً.

هداية . الخلف قياس يبين عين المطلوب من تكذيب نقيضه.

كقولنا ان لم يصدق بعض الانسان زنجي فنقيضه صادق، و هو قولنا كل انسان زنجي، و كل زنجي اسود، على انها مقدمة صادق، فينتج ان لم يصدق بعض الناس ليس بزنجي فكل انسان اسود، لكن التالي كاذب،

فالمقدم مثله

هداية . الضمير قياس يحذف منه كبراه اما لوضوحها او

لأنها كاذبة في نفسها، حتى لو صرح بها لظهر كذبها، فيحذف من القياس ايها ما للصدق. مثال الاول مؤثرية الشيء في الشيء مغايرة لذلك الشيء. لأنه يمكن يعقل احدهما مع الذهول عن الآخر، فيكون مغايراً له. فحذف الكبرى، و هو قولنا و كل شيء يمكن ان يعقل احدهما مع الذهول عن الآخر فهما متغايران. مثال الثاني فلان يطوف بالليل فهو سارق. فحذف الكبرى، و هو قولنا و كل من يطرق بالليل فهو سارق.

البرهان قياس مؤلف من مقدمات يقينية الانتاج يقين. الجدل قياس مؤلف من مقدمات مشهورة او مسلمة، و هي التي يسلمها الخصم. و الخطابة قياس مؤلف من مقدمات مقبولة ممن يعتقد فيه او مظنونة. و الشعر قياس مؤلف عن مقدمات مخيلة تنقبض منها النفس او تنسبط. و السوفسطائية قياس مؤلف من مقدمات وهمية او متببهة بالحق او مشهورة لمناسبة بينهما اما لفظاً او معنى.

هداية . الغلط في القياس اما ان تقع من جهة مادته التي هي

المقدمات او من جهة صورته التي هي التأليف او منها جميعاً. اما الغلط من جهة مادة فلکذب المقدمات و اشباهها بالصادق اما لفظاً او معنى. فاما الغلط من جهة الصورة فهو ان لا يكون تأليفه تأليف احد الاشكال بان لم يحصل بين المقدمتين مشارك. كما اذا جعل الوسط لفظاً مشتركاً، او كان تأليف احد الاشكال، لكن لم يحصل فيه شرط الانتاج او عبّر عن الاصغر و الاوسط و عن الاوسط و الاكبر باسمين مترادفين، و هو المصادرة على المطلوب

و من اراد تفاصيل ما ذكرنا من الجملات و الاستقصاء في المنطق فليرجع الى كتابنا المسمى بزبدة الاسرار، و الله ولى الابرار تمت الرسالة في القواعد المنطقية.

القسم الثاني في الطبيعيات و هو مرتب على ثلاثة فنون. الفن الاول فيما
يعم الاجسام و هو مشتمل على عشرة فصول.

فصل في ابطال الجزء الذي لا يتجزى لان لو فرضنا جزءا

بين جزئين فاما ان يكون الوسط مانعا من تلاقي الطرفين او لا يكون. لا
سبيل الى الثاني لانه لو لم يكن مانعا لكانت الاجزاء متداخلة فلا يكون
وسطا و طرفا و قد فرضنا الوسط و الطرف و هذا خلف فثبت كونه
مانعا من تلاقيهم فما به يلاقي الوسط احد الطرفين غير ما به يلاقي
الطرف الآخر فينقسم. و لان لو فرضنا جزءا على ملتقى جزئين فاما ان
يلاقي واحدا منهما فقط، او مجموعهما، او من كل واحد منهما شيئا
الاول محال و الا لم يكن على الملتقى فتعين احد القسمين الآخرين فيلزم
الانقسام لا محالة.

فصل في اثبات الهيولى. كل جسم فهو مركب من جزئين

يحل احدهما في الآخر و يسمى المحال الهيولى والحال الصورة. و
برهانه ان بعض الاجسام القابلة للانفكاك مثل الماء و النار يجب ان
يكون في نفسه متصلا واحدا و الا لزم الجزء الذي لا يتجزى و يلزم من
هذا اثبات الهيولى في الاجسام كلها لان ذلك المتصل قابل للانفصال.
فالقابل للانفصال في الحقيقة اما ان يكون هو المقدار او الصورة
المستلزمة للمقدار او معنى آخر. لا سبيل الى الاول و الثاني و الا
لزم اجتماع الاتصال و الانفصال* و القابل* يجب وجوده مع المقبول
فتعين ان يكون القابل معنى آخر و هو المعنى من الهيولى. و اذا ثبت
ان ذلك الجسم مركب من الهيولى و الصورة وجب ان تكون الاجسام كلها

مركبة من الهيولى و الصورة لان الطبيعة المقدارية اما ان تكون بذاتها غنية عن المحال او لم تكن. و الاول محال و الا لاستحال حلولها في المحال المستلزم لافتقارها اليه لان الغني بذاته عن الشيء استحال حله فيه فتعين افتقارها بذاتها الى المحال. فكل جسم مركب من الهيولى والصورة.

فصل في ان الصورة الجسمية لا تتجرد عن الهيولى لانها لو وجدت بذاتها بدون حلولها في الهيولى فاما ان يكون متناهية او غير متناهية. لا سبيل الى الثاني لان الاجسام كلها متناهية و الا لامكن ان يخرج من مبدأ واحدا متدادان على نسق واحد كأنهما ساقا مثلث. فكلما كانا اعظم كان البعد بينهما ازيد، فلو امتدا الى غير النهاية لامكن بينهما بعد غير متناه مع كونه محصورا بين حاصرين. هذا خلف و اما بيان انه لا سبيل الى القسم الاول فلانها لو كانت متناهية لاحاط بها حد واحد او حدود فتكون متشكلة لان الشكل هو الهيئة الحاصلة من احاطة الحد الواحد او الحدود بالمقدار. فذلك الشكل اما ان يكون للجسمية لذاتها و هو محال و الا لكانت الاجسام كلها متشكلة بشكل واحد او بسبب لازم للجسمية و هو ايضا محال لما مر او بسبب عارض لها و هو ايضا محال و الا لامكن زواله فاما ان نتشكل الصورة بشكل آخر فتكون قابلة للانفصال. و كل ما يقبل الانفصال فهو مركب من الهيولى و الصورة فتكون الصورة العارية عن الهيولى مقارنة لها. هذا خلف.

فصل في ان الهيولى لا تتجرد عن الصورة لانها لو تتجردت

عن الصورة فاما ان تكون ذات وضع او لا تكون. لا سبيل الى كل واحد من القسمين، فلا سبيل الى تجردها عن الصورة. اما انه لا سبيل الى الاول فلانها اما ان تنقسم او لا لا سبيل الى الثاني لان كل ما له وضع فهو منقسم على ما مر في نفي الجزء الذي لا يتجزى. و لا سبيل الى الاول لانها اما ان تنقسم في جهة واحدة فتكون خطأ، او في جهتين فتكون سطحا جوهريا، او في ثلث جهات فتكون جسما و كل واحد منهما باطل. اما انه لا يجوز ان تكون خطأ فلان وجود الخط على سبيل الاستقلال محال لانه اذا انتهى اليه طرفا السطحين فاما ان يحجب تلاقيهما او لا يحجب. لا جائز ان لا يحجب و الا لزم تداخل الخطوط و هو محال لان كل خطين مجموعهما اعظم من الواحد و التداخل يوجب خلافه هذا خلف. و لا جائز ان يحجب و الا لانقسم الخط في جهتين لان ما يلاقي منه احدهما غير ما يلاقي الآخر و هو محال. و اما انه لا يجوز ان يكون سطحا فلانها لو كانت سطحا فاذا انتهى اليه طرفا الجسمين فاما ان يحجب تلاقيهما او لا يحجب. و كل واحد منهما باطل على ما مر في الخط.

و اما انه لا يجوز ان تكون جسما فلانها لو كانت جسما كانت مركبة من الهيولى و الصورة لما مر. و اما انه لا سبيل الى الثاني فلانها اذا كانت غير ذات وضع فاذا اقترنت بها الصورة الجسمية فاما ان لا تحصل في حيز اصلا، او تحصل في جميع الاحياز، او تحصل في بعض الاحياز دون بعض. و الاول و الثاني محالان بالبداهة. و الثالث ايضا محال لان حصولها في كل واحد من الاحياز ممكن. فلو حصلت في بعض الاحياز دون البعض يلزم الترجيح بلا مرجح و هو

محال و لا يلزم على هذا التقرير ان الماء اذا انقلب هواء او على العكس صار اولى بموضع لان الوضع السابق يقتضي الوضع اللاحق فلا يكون ترجيحاً بلا مرجح.

فصل في الصورة النوعية. اعلم ان لكل واحد من الاجسام الطبيعية صورة اخرى غير الصورة الجسمية لان اختصاص بعض الاجسام ببعض الاحياز دون البعض ليس لامر خارج و لا لهيولى اما ان يكون للجسمية العامة او لصورة اخرى لا سبيل الى الاول و الا لاشتركت الاجسام كلها في ذلك، فتعين الثاني و هو المطلوب.

هداية و اعلم ان الهيولى ليست علة للصورة لانها لا تكون موجودة بالفعل قبل وجود الصورة لما مر، و العلة الفاعلية للشيء يجب ان تكون موجودة قبله. و الصورة ايضا ليست علة للهيولى لان الصورة انما يجب وجودها مع الشكل او بالشكل. و الشكل لا يوجد قبل الهيولى فلو كانت الصورة علة لوجود الهيولى لكانت منقدمة على الهيولى، هذا خلف.

فاذن وجود كل منها عن سبب منفصل و ليست الهيولى غنية عن الصورة من كل الوجوه لما بينا انها لا تقوم بالفعل بدون الصورة و ليست الصورة ايضا غنية عن الهيولى من كل الوجوه لما بينا انها لا توجد بدون الشكل المفتقر الى الهيولى. فالهيولى تفتقر الى الصورة في *بقائها و الصورة مفتقرة الى الهيولى في تشكيلها.

فصل في المكان. و هو اما الخلاء، او السطح الباطن من الجسم

الحاوي المماس للسطح الظاهر من الجسم المحوى. و الاول باطل، فتعين الثاني. و انما قلنا الاول باطل لانه لو كان خلاء فاما ان يكون لا شيئا محضا، او بعدا موجودا مجردا عن المادة. لا سبيل الى الاول لانه يكون خلاء اقل من خلاء، فان الخلاء بين الجدارين اقل من الخلاء بين المدينتين و ما يقبل الزيادة و النقصان استحالة ان يكون لا شيئا محضا و لا سبيل الى الثاني لانه لو وجد البعد مجردا عن الهيولى لكان لذاته غنيا عن المحل، فاستحال اقترانه به. هذا خلف

فصل في الحيز. كل جسم فله حيز طبيعي لانا لو فرضنا عدم

القواسر لكان في حيز و ذلك الحيز اما ان يستحقه الجسم لذاته، او لقاسر. لا سبيل الى الثاني لانا فرضنا عدم القواسر، فتعين الاول. فاذا انما يستحقه لطبيعته، و هو المطلوب. و لا يجوز ان يكون لجسم ما حيزان طبيعيان فاذا حصل في احدهما فاما ان يطلب الثاني او لا. فان طلب الثاني يلزم ان لا يكون الحيز الاول الذي حصل فيه طبيعيا، و قد فرضناه طبيعيا. هذا خلف. و ان لم يكن طالبا للثاني يلزم ان لا يكون الحيز الثاني طبيعيا، و قد فرضناه طبيعيا. هذا خلف

فصل في الشكل كل جسم فله شكل طبيعي لان كل جسم متناه.

و كل متناه فهو متشكل ، و كل متشكل فله شكل طبيعي. فكل جسم فله شكل طبيعي. اما ان كل جسم متناه فلما مر و اما ان كل متناه فهو متشكل فلانه يحيط به حد واحد، او حدود، فيكون متشكلا و انما قلنا ان

كل متشكل فله شكل طبيعي لانا لو فرضنا ارتفاع القواسر لكان على شكل معين، و ذلك الشكل اما ان يكون لطبعه، او لقاشر لا سبيل ال الثاني لانا فرضنا عدم القواسر، فاذا هو عن طبعه و هو المطلوب.

فصل في الحركة و السكون اما الحركة فهي الخروج من القوة

الى الفعل على سبيل التدريج. و اما السكون فهو عدم الحركة عما من شأنه ان يتحرك. و كل جسم متحرك فله محرك غير الجسمية اذ لو تحرك الجسم بما هو جسم لكان كل جسم متحركا و التالي كاذب فالقدم مثله. ثم الحركة على اربعة اقسام. حركة في الكم، كالنمو و الذبول، و حركة في الكيف، كتسخن الماء و تبرده مع بقاء صورته النوعية، و تسمى هذه الحركة استحالة؛ و حركة في الين، و هي انتقال الجسم من مكان الى مكان على سبيل التدريج، و تسمى نقلة، و حركة في الوضع، و هي ان تكون للجسم حركة على الاستدارة، فان اجزائه يباين اجزاء مكانه و يلزم كله مكانه. فقد اختلف نسبة اجزائه الى اجزاء مكانه على التدريج و نقول ايضا الحركة الذاتية اما طبيعية، او قسرية، او ارادية لان القوة المحركة اما ان تكون مستفادة من خارج او لا تكون. فان لم تكن مستفادة من خارج فاما ان يكون لها شعور او لا يكون. فان كان لها شعور فهي الحركة الارادية، و ان لم يكن لها شعور فهي الحركة الطبيعية، و ان كانت مستفادة من خارج فهي الحركة القصيرية.

فصل في الزمان. اذا فرضنا حركة واقعة في مسافة في مقدار

من السرعة و ابتدأت معها حركة اخرى البطأ منها و اتفقتا في الاخذ و الترك وجدت البطيئة قاطعة لمسافة اقل من مسافة السريعة و

السريعة قاطعة لمسافة اكثر منها. و اذا كان كذلك كان بين اخذ السريعة و تركها امكان يسع قطع مسافة معينة بسرعة معينة و اقل منها ببطؤ معين. فهذا الامكان قابل للزيادة و النقصان و غير ثابت اذ لا يوجد اجزائه معا. فهنا امكان متقدر غير ثابت، و هو المعنى من الزمان و هو مقدار الحركة لانه كم و لا يخلو اما ان يكون مقدارا لهيئة قارة او لهيئة غير قارة. لا سبيل الى الاول لان الزمان غير قار و ما لا يكون فارا لا يكون مقدارا لهيئة قارة فهو مقدارا لهيئة غير قارة. و كل هيئة غير قارة فهو الحركة. فالزمان مقدار الحركة و هو المطلوب.

و نقول ايضا ان الزمان لا بداية له و لا نهاية له لانه لو كان له بداية لكان عدمه قبل وجوده قبلية لا توجد مع البعدية، و كل قبلية لا توجد مع البعدية، فهي زمانية، فيكون قبل الزمان زمان. هذا خلف و لو كان له نهاية لكان عدمه بعد وجوده بعدية لا توجد مع القبلية، فيكون زمانية، فيكون بعد الزمان زمان. هذا خلف.

الفن الثاني في الفلكيات و فيه فصول.

فصل في اثبات كون الفلك مستديرا و بياننه. ان ههنا

جهتين لا تتبدلان، احدهما فوق و الاخرى تحت. و كل واحدة منهما موجودة ذات وضع غير منقسمة في امتداد مأخذ الحركة. و متى كان كذلك كان الفلك مستديرا. و انما قلنا ان الجهة موجودة ذات وضع، لانها لو لم تكن كذلك لما امكنت الاشارة اليها و لما امكن اتجاه المتحرك اليها. و انما قلنا انها غير منقسمة، لانها لو انقسمت و وصل المتحرك اقرب

الجزئين من الجهة و تحرك، فاما ان يتحرك من المقصد او الى المقصد.
فان تحرك من المقصد لم يكن ابعد الجزئين من الجهة، و ان
تحرك الى المقصد لم يكن اقرب الجزئين من الجهة و اذا ثبت هذا
فنقول، تحدد الجهات ليس في خلاء لاستحالته و لا في ملاء متشابه و الا
لما كانت الجهتان مختلفتين بالطبع، فلا يكون احدهما مطلوبة و الاخرى
متروكة. فهذا خلف. فاذا تحددت الجهات في اطراف و نهايات خارجة عن
الملاء المتشابه، و متى كان كذلك كان تحددها بجسم كروي لان تحددها اما
ان يكون بجسم واحد او باكثر.

فان كان بجسم واحد وجب ان يكون كريا لان الجسم الذي ليس
بكروي لا يتحدد به جهة السفلى لان جهة السفلى غاية البعد و الا لتبدلت
بالنسبة الى ما هو ابعد منه، و لا يتحدد به غاية البعد، فلا يتحدد به
جهة السفلى. و ان كان بأجسام متعددة وجب ان يحيط بعضها ببعض و
الا لم يتعين بها غاية البعد لان ما هو ابعد عن بعدها فهو اقرب من
الآخر. و كلما يفرض غاية البعد عن بعضها لم يكن غاية البعد عن
المجموع فيجب ان يكون بعضها محيطا بالآخر، فحصل المطلوب.

فصل في ان الفلك بسيط، اي لم يتركب من اجسام مختلفة

الطبائع لانه لا يقبل الحركة المستقيمة. و متى كان كذلك كان بسيطا.
اما انه لا يقبل الحركة المستقيمة فلان كل ما يقبل الحركة المستقيمة
فانه متجه الى جهة و تارك لاخرى. و كل ما هذا شأنه فالجهات متحددة
قبله لا به.

و الفلك ليس كذلك بل يتحدد به الجهات، فلا يكون قابلا للحركة

المستقيمة. و متى كان كذلك وجب ان يكون بسيطا اذ لو كان مركبا فاما ان يكون كل واحد من اجزئه على شكل طبيعي، او قسري. لا سبيل الى الاول و الا لكان كل واحد منها كريا لان الشكل الطبيعي للبسيط هو الكرة. و لو كان كل واحد منها كرة لاستحال ان يحصل من مجموعها سطح كروي متصل الاجزاء. و لا سبيل الى الثاني لانه لو لم يكن كل واحد منها كرة فيكون طالبا للشكل الطبيعي، فيكون قابلا للحركة المستقيمة.

فصل في ان الفلك قابلا للحركة المستديرة لان كل جزء من

اجزائه المفروضة فيه لا يختص بما يقتضي حصول وضع معين و محاذاة متعينة لتساوى الاجزاء في الطبيعة، فكل جزء يمكن ان يزول عن وضعه. و متى كان كذلك كان قابلا للحركة المستديرة، و نقول ايضا يجب ان يكون فيه مبدأ ميل مستدير يتحرك به و الا لما كان قابلا للحركة المستديرة لكان التالي كاذب، فالقدم مثله بيان الشرطية انه لو لم يكن في طبعه مبدأ ميل مستدير لما قبل الميل من خارج، فلا يكون فيه ميل اصلا، فيمتنع ان يتحرك على الاستدارة.

و انما قلنا انه لو لم يكن في طبعه مبدأ مستدير لما قبل الميل من خارج لانه لو تحرك من خارج لتحرك مسافة في زمان، و يكون ذلك الزمان اقصر من زمان حركة ذي ميل، و يتحرك بمثل تلك القوة في عين تلك المسافة و الا لكان الشئ مع العائق كهو لا معه. هذا خلف. و ذلك الزمان الاقصر له نسبة لا محالة الى الزمان الاطول. فاذا فرصنا ذا ميل آخر ميله اضعف من ذي الميل الاول بحيث يكون نسبته الى الميل

الاول مثل نسبته الزمان الاقصر الى الزمان الاطول، فيتحرك بمثل تلك القوة في مثل زمان عديم الميل مثل مسافة لان الحركة تزداد سرعتها بقدر انتقاص القوة الميلية التي في الجسم لانه لو استقصى من القوة التي في الجسم و لا يزداد السرعة، لم تكن القوة الميلية مابعة من الحركة هذا خلف

فظهر ان الجسم القليل الميل و الذي لا ميل فيه متساويان في السرعة، و هو محال. و هذا المحال انما لزم من فرض تحرك ذلك الجسم الذي لا ميل فيه اصلا، او من فرض الميل الذي نسبته الى الميل الاول كنسبة زمان عديم الميل الى زمان ذي الميل الاول. لكن فرض الميل على النسبة المذكورة ممكن، فهذا المحال انما لزم من فرض تحرك الجسم الذي لا ميل فيه اصلا فيكون محالا. و نقول ايضا ان الفلك لا يكون في طبعه مبدأ ميل مستقيم و الا لكانت الطبيعة الواحدة تقتضي الاثرين المتنافيين هذا خلف

فصل في ان الفلك لا يقبل الكون، و الفساد، و الخرق، و الالتيام. اما انه لا يقبل الكون و الفساد فلانه محدد الجهات و لا شيء من محدد الجهات يقبل الكون و الفساد. اما الصغرى، فقد مر تقريرها اما الكبرى فلان كل ما يقبل الكون و الفساد فصورته احادته حيز طبعي و لصورته الفاسدة حيز آخر صبغي لما بينا.

ان كل جسم فله حيز طبعي، و كل ما هذا شأنه فهو قابل للحركة المستقيمة لان الصورة الكائنة اما ان تحصل في حيز طبعي، او في حيز غريب. فان حصلت في حيز غريب، فكانت تقتضي مبلا

مستقيما الى حيزها الطبيعي، و ان حصلت في حيز طبيعي، فالصورة
الفاصلة كانت قبل الفساد حاصلة في حيز غريب، فكانت تقتضي ميلا
مستقيما الى حيزها الطبيعي.

و اما انه لا يقبل الخرق و الالتيام فلان ذلك ايضا انما يحصل
بالحركة المستقيمة، و الفلك لا يقبل الحركة المستقيمة، فلا يقبل الخرق و
الالتيام

فصل في ان الفلك يتحرك على الاستدارة دائما لان الحركة
الحافظة للزمان تكون مستقيمة، او مستديرة. لا جائز ان تكون
مستقيمة لانها اما ان تذهب الى غير النهاية، او ترجع. لا سبيل الى
الاول و الا لزم وجود غير بعد متناه. و لا سبيل الى الثاني لانها لو
رجعت يكان تنتهي الى طرف، فتكون مقتضية للسكون لان بين كل
حركتين مستقيمة سكونا لان الميل الوصل الى ذلك الطرف موجود حال
الوصول لانه يفعل الايصال حال الوصول.

فلو لم يكن موجودا حال الوصول لاستحال ان يفعل الوصول.
و كلما كان الميل الموصل موجودا، لم يحدث فيه ميل يقتضي كونه غير
موصل لاستحالة اجتماع الميلين المتنافيين. فالحال الذي فيه ميل
الوصول غير الحال الذي فيه ميل لا وصول.
و كل واحد من الميلين أني لان الوصول و كونه غير موصل أني
لان حال الوصول لو كان زماتا او تقسم فحين ما يكون الجسم في احد
طرفيه لم يكن واصلا الى المنتهي. هذا خلف. و كذا حال صيرورته غير

موصول و اذا كان كل واحد منها أنيا وجب ان يكون بين الآنين زمان لا بتحرك فيه الجسم و الا لزم تعاقب الآنين، فيكون الزمان مركبا من اجزاء لا يتجزى و يلزم منه تركب المسافة من اجزاء لا يتجزى لانطباقها على الحركة. هذا خلف.

فعلم ان الحركة الحافظة للزمان ليست مستقيمة، فتكون مستديرة. و هذه الحركة غير منقطعة و الا لزم انقطاع الزمان. فاذا يكون الفلك يتحرك على الاستدارة دائم، و هو المطلوب

هداية . الحبة المرمية الى الفوق عند نزول الجبل تنتهي

حركتها الى السكون، و لكنه غير مانع لحركة الجبل لان سكونها أني و حركة الجبل زمانية و ليس بينهما ممانعة.

فصل في ان الفلك متحرك بالادارة لان حركته الذاتية لو لم

تكن ارادية لكانت اما طبيعية، او قسرية. لا جائز ان تكون طبيعية لان الحركة الطبيعية هرب عن حالة منافرة و طلب لحالة ملايمة. و ذلك في الحركة المستديرة محال اما انها لا يمكن ان تكون هرب فلان كل نقطة يتحرك عنها الجسم بالحركة المستديرة. فحركته عنها نوجهه اليها، و الحرب عن الشئ بالطبع استحال ان يكون توجهها اليه. و اما انها ليست طالبة لحالة ملايمة فلان الطبيعية اذا اوصلت الجسم بالحركة الى الحالة المطلوب اسكنته، و المستديرة ليست كذلك. و لا جائز ان تكون قسرية لان القسر على الخلاف لطبع، فحيث لا طبع لا قسر فيه.

فصل في ان القوة المحركة للفلك يجب ان يكون مجردة عن

المادة، لان القوة المحركة للفلك تقوى على افعال غير متناهية، و لا شئ من القوى الجسمانية كذلك، فالمحرك للفلك ليست قوة جسمانية و انما قلنا ان القوة الجسمانية لا تقوى على تحريكات غير متناهية لان كل قوة جسمانية فهي قابلة للتجزئ، و كل قوة قابلة للتجزئ فان الجزء منها يقوى على شئ الجملة تقوى على مجموع تلك الاشياء و الا لكانت الجزء مساويا للكل في التأثير، هذا خلف

و متى كان كذلك فالمجموع لا يقوى على غير المتناهي لان الجزء منها اما ان يقوى على جملة متناهية من مبدأ معين، او على جملة غير متناهية. و الثاني باطل اذ المجموع بقوى على ما هو زائد، فيلزم الزيادة على غير المتناهي المتسق النظام، هذا خلف. فاعلم ان الجزء يقوى على جملة متناهية، و الجزء الآخر مثله. فالمجموع لا يفوى على غير المتناهي لان انضمام المتناهي الى المتناهي لا يوجب اللاتناهي. فثبت ان كل ما يقوى عليه القوة الجسمانية، فهو متناهي.

فصل في ان المحرك القريب للفلك قوة جسمانية لان

التحريكات الاختيارية لا تقع الا عن ارادة اما ان تقع عن تصور كلي، او جزئي. لا سبيل الى الاول لان التصور الكلي نسبته الى جميع الجزئيات على السوية، فلا يقع منه بعض الحركات الجزئية دون بعض و الا لزم الترجيح بلا مرجح. فمبدأ التحريكات الجزئية له تصورات جزئية، و كل ما له تصور جزئي فهو جسماني لان الصورة الجزئية ترتسم و هي اصغر، و ترتسم و هي اكبر. فاما ان يكون الاختلاف في الصغر و الكبر لاختلاف الصورتين بالحقيقة، او لاختلاف المأخوذ عنه الصورتان بالصغر و الكبر،

او لاختلافهما في المحل من المدرك.

لا سبيل الى الاول لاننا نتكلم في الصورتين من نوع واحد. و لا سبيل الى الثاني لان الصورة المختلفة بالصغر و الكبر لا يجب ان تكون مأخوذة من خارج. فتعين القسم الثالث، فتكون الكبيرة منها مرتسمه في غير ما ارتسمت فيه الصغيرة، فينقسم المدرك لا محالة في الوضع. فما هذا شأنه فهو جسماني، فهو المطلوب.

الفن الثالث في العنصريات، و هو مشتمل على ستة فصول.

فصل في البسائط العنصرية. الماء، و الارض، و النار، و

الهواء. و كل واحد منها يخالف الآخر في صورته الطبيعية و الا لشغل كل واحد منها بالطبع حيز الآخر. و التالي باطل، فالقديم مثله. و كل واحد منها قابل للكون و الفساد لان الماء ينقلب حجرا و الحجر يتحل ماء، و كذا الهواء ينقلب ماء كما برى في قلل الجبال، فانه يغلظ الهواء و يصير ماء و يتقاطر دفعة. و الماء ايضا ينقلب هواء بالتخير، و كذا الهواء ينقلب نارا كما في كور الحدادين.

و النار ايضا ينقلب هواء كما يشاهد في المصباح. و نقول ايضا الكيفيات زائدة على الصورة الطبيعية لانها تستحيل في الكيفيات مثل التسخن و التبرد مع بقاء الصورة الطبيعية. و لو كانت نفس الصورة الطبيعية لاستحال ذلك. و البسائط اذا اجتمعت في المركب و فعل بعضها في بعض بقواها و كسر كل واحد منها صورة كيفية الآخر، فتحصل كيفية متوسطة توسط ما بين الكيفيات المتضادة متشابهة في اجزائه، و هو المزاج.

فصل في الكائنات الجو. اما السحاب و المطر و ما يتعلق

بهما، فالسبب الاكثري في ذلك تكاثف أجزاء البخار الصاعد لان مل يجاور الماء من الهواء يستفيد كيفية البرد من الماء ثم الطبقة التي ينقطع عنها تأثير شعاع الشمس تبقي باردة فاذا بلغ البخار في صعوده اليها تكاثف بواسطة البرد. فان لم يكن البرد قويا اجتمع ذلك و تقاطر، فالمجتمع هو السحاب، و المتسقاط هو المطر. و ان كان البرد قويا فاما ان يصل البرد الى اجزاء السحاب قبل اجتماعها او لا يصل. فان وصل قبل اجتماعها ينزل السحاب ثلجا، و ان لم يصل ينزل بردا. و اما اذا لم يصل الى الطبقة الباردة، فان كان كثيرا فقد بنعقد سحابا ماطرا، و قد لا ينعقد يسمى ضبابا، و ان كان قليلا فاذا ضربه البرد فان لم ينحمد فهو الطل، و ان انحمد فهو الصقيع.

و اما الرعد و البرق فسببها ان الدخان اذا ارتفع و احتبس فيما بين السحاب، فما صعد من الدخان الى العلو مزق السحاب تمزيقا عنيفا، فيحصل صوت هائل هو الرعد بتمزيقه. و ان اشتعل الدخان بالحركة كان برقاً و صاعقة.

و اما الرياح فقد تكون بسبب ان السحاب اذا ثقل لكثرة البرد اندفع الى السفلى، فصار هواء متحركا و قد تكون لاندفاع يعرض فيصير السحاب من جانب الى طرف آخر، و قد تكون لانبساط الهواء بالتخلخل في جهة و قد تكون بسبب برد الدخان المتصعد و نزوله و من الرياح ما يكون سموما محرقا لا حتراقه في نفسه بالاشعة او لمروره بالارض الحارة جدا.

و اما قوس قزح فهي انما تحدث من ارتسام ضوء النير الاكبر في اجزاء رشيية مستديرة. اختلاف الوانها بسبب اختلاف ضوء النير، و الوان الغمام المختلفة. و اما الهالة فايضا انما تحدث من ارتسام ضوء النير في اجزاء رشيية مستديرة. اختلاف الوانها بسبب اختلاف ضوء النير و الوان الغمام المختلفة.

و اما الهالة فايضا انما تحدث من ارتسام ضوء النير في اجزاء رشيية مستديرة. و اما الشهب فبسببها ان الدخان اذا بلغ حيز النار و كان لطيفا، اشتعل فيه النار، فانقلب الى النارية و يلتهب بسرعة حتى يرى كالمنطفئ

و اما الزلزلة و انفجار العيون فاعلم ان البخار اذا احتبس في الارض يميل الى جهة و يتبرد بها، فينقلب مياها مختلطة باجزاء مخاربة اذا قل؛ فاذا كثر بحيث لا يسعه الارض اوجب انشقاق الارض و انفجر منه العيون. و اذا غلظ بحيث لا ينفذ في مجاري الارض اجتمع و لم يمكنه النفوذ، فزلزلت الارض.

فصل في المعادن ابخرة و الادخنة المحتبسة في الارض اذا لم

تكن كثيرة اختلطت على ضروب من الاختلاطات المختلفة في الكم و الكيف، فيكون منها الاجسام المعدنية. فان غلب البخار على الدخان يتولد اليشم، و البلور، و الزيت، و الزرنيخ، و الرصاص، و غيرها من الجواهر المشقة. و ان غلب الدخان يتولد الملح، و الزاج، و الكبريت، و النوشادر. ثم من اختلاط بعض هذه مع بعض تولدت الاجسام الارضية.

فصل في النبات. و له قوة عديمة الشعور يصدر عنها

حركات النبات في الاقطار و افعال مختلفة بآلات مختلفة، و تسمى
نفسا نباتية. و هي كمال اول لجسم طبيعي الى من جهة ما يتولد، و يزيد،
و يغتذي فقط.

فلها قوة غاذية، و هي القوة التي تحيل جسما آخر الى مشاكلة
الجسم الذي هي فيه. فتلصق به بدل ما تحلل عنه بالحرارة.
و لها قوة نامية، و هي التي تزيد في الجسم الذي فيه زيادة في
اقطاره طولاً، و عرضاً، و عمقاً الى ان يبلغ كمال النشؤ على تناسب
طبعي.

و لها قوة مولدة، و هي التي تأخذ من الجسم الذي هي فيه جزء
و تجعله مادة و مبدأ لمثله. و الغاذية تجذب الغذاء، و تمسكه، و تهضمه، و
تدفع ثقله.

فلها خواص اربع قوة؛ جاذبة، و ماسكة، و هاضمة، و دافعة للثقل.
و النامية تقف من الفعل اولاً، و تبقي الغاذية تفعل الى ان تعجز،
فيعرض الموت.

فصل في الحيوان، و هو مختص بالنفس الحيوانية. و هو

كمال اول لجسم طبيعي آلي من جهة ما تدرك الجزئيات الجسمانية و
تتحرك بالارادة. فله قوة مدركة و محركة.

اما المدركة فهي اما في الظاهر او في الباطن. اما التي في
الظاهر فهي خمس؛ السمع، و البصر، و الشم، و الذوق، و اللمس. و أما
التي في الباطن فهي ايضاً خمس؛ الحس المشترك، و الخيال، و الوهم، و

الحافظة، و المتصرفة.

اما الحس المشترك فهي قوة مرتبة في مقدمة التجويف الاول في الدماغ تقبل جميع الصور المنطبعة في الحواس الظاهرة. و هي غير البصر لانا نشاهد القطرة النازلة خطأ مستقيما، و النقطة الدائرة بسرعة خطأ مستديرا و ليس ارتسامها في البصر اذ البصر لا يرتسم فيه الا المقابل، و هو القطرة و النقطة. فاذا ارتسامها انما يكون في قوة اخرى.

و اما الخيال فهو قوة مرتبة في مؤخر التجويف الاول تحفظ جميع صور الحسوسات و تمثلها بعد الغيبوبة. و هي خزانة الحس المشترك.

و اما الوهم فهو قوة مرتبة في آخر التجويف الاوسط من الدماغ تدرك المعاني الجزئية الموجودة في الحسوسات، كالقوة الحاكمة في الشاة بان الذئب مهروب عنه و الولد معطوف عليه.

و اما الحافظة فهي قوة مرتبة في اول التجويف الآخر من الدماغ تحفظ ما تدركه القوة الوهمية من المعاني الجزئية الغير المحسوسة الموجودة في الحسوسات. و هي خزانة القوة الوهمية.

و اما المتصرفة فهي قوة مرتبة في البطن الاوسط من الدماغ من شأنها تركيب بعض ما في الخيال او الحافظة مع بعض، و تفصيله عنه.

و اما القوة المحركة فتتقسم الى باعثة و فاعلة. اما الباعثة فهي القوة التي اذا ارتسمت في الخيال صورة مطلوبة او مهروبة عندها حملت الفاعلة على التحريك. و هي ان حملت الفاعلة على تحريك يطلب به الأشياء المتخيلة ضارة او نلقة لحصول اللذة تسمى قوة شهوانية. و ان

حملت على تحريك يدفع به الشئ المتخيل ضارا او مفيدا للغلبة تسمى قوة غضبية. و اما الفاعلة فهي التي تعد العضلات على التحريك.

فصل في الانسان هو مختص بالنفس الناطقة. هي كمال اول

لجسم طبعي آلي من جهة ما تدرك الامور الكلية، و تفعل الافعال الفكرية. فلها قوة عاقلة، تدرك بها التصورات او التصديقات، و قوة عاملة، تحرك بها بدن الانسان الافعال الجزئية بالفكر و الرؤية على مقتضي اراء تخصصها

و النفس باعتبار القوة العاقلة لها مراتب اربع. المرتبة الاولى ان تكون خالية عن جميع المعقولات، بل هي مستعدة لها، و هي العقل الهولاني.

و المرتبة الثانية ان تحصل لها المعقولات لبديهية و تستعد لان تنتقل من البديهيات الى النظريات، و هي العقل بالملكة.

و المرتبة الثالثة ان تحصل لها المعقولات لكن لا تطالعها بالفعل بل معلومات مخزونة عندها، و هي العقل بالفعل. و المرتبة الرابعة ان تطالع معقولاتها المكتسبة، و هي العقل المطلق و تسمى معقولاتها عقلا مستفادا.

ثم العقل بالملكة ان كان في الغلبة نسمى قوة قدسية. و اعلم ان القوة العاقلة مجردة عن المادة لانها لو كانت مادية لكانت ذات وضع. فاما ان لا تنقسم او تنقسم. لا سبيل الى الاول لان كل ما له وضع ينقسم على ما مر في نفي الجزء. و لا سبيل الى الثاني لان معقولاتها ان كان بسيطة يلزم انقسامها لان الحال في احد جزئها غير الحال في الجزء الآخر.

و ان كانت مركبة و كل مركب انما يتركب من البسائط فيلزم
انقسام تلك البسائط. هذا خلف. و نقول ايضا ان التعقل ليس بالآلة
الجسمانية و الا يعرض له الكلال لصعف البدن، و ليس كذلك لان البدن
بعد الاربعين يأخذ في النقصان مع ان القوة العاقلة هناك بشروع في
الكمال

و نقول ان النفوس الناطقة حادثة لانها لو كانت موجودة قبل
البدن فالاختلاف بينهما اما ان يكون بالماهية و لوازمها، او بعوارضها
المفارقة. لا جائز ان يكون بالماهية و لوازمها لانها مشتركة، و ما به
الاشتراك غير ما به الامتياز. و لا جائز ان يكون بالعوارض المفارقة لان
العوارض المفارقة انما تلحق الشئ بسبب القوابل لان الماهية لا تستحق
العوارض لذاتها و الا لكان العارض لازما، و القابل للنفس انما هو البدن.
فمتى لم تكن الابدان موجودة لم تكن النفوس موجودة، فتكون حادثة
ضرورة.

القسم الثالث في الالهيات، و هو مرتب على ثلاثة فنون. الفن الاول
في تقاسيم الوجود، و هو مرتب على سبعة فصول.

فصل في الكلي و الجزئي. اما الكلي فليس واحدا بالعدد و الا

لكان الشئ الواحد بالعدد بعينه موصوفا بالاعراض المتضادة، مثل كونه
اسود و ابيض. هذا خلف بل هو معنى معقول في النفس مطابق لكل
واحد من جزئياته في الخارج على معنى ان ما في النفس، لو وجد في اي
شخص من الاشخاص الخارجية لكان هو ذلك الشخص بعينه من غير
تفاوت اصلا. و اما الجزئي فانما تيعين بمشخصاته الزائدة على الطبيعة
الكلية، لان كل كلي من حيث هو كل فان نفس تصوره غير مانع من
الشركة كثيرين و الشخص من حيث هو مانع من الشركة. فالتشخص
زائد على الطبيعة الكلية.

فصل في الواحد و الكثير. اما الواحد فيقال على ما لا ينقسم

من الجهة التي يقال له انه واحد. و هو قد يكون بالجنس، كالانسان و
الفرس؛ و قد يكون بالنوع، كزيد و عمر؛ و قد يكون بالمحمول، كالقطن و
الثلج؛ و قد يكون بالموضوع، كالكتاب و الضاحك؛ و قد يكون واحدا
بالعدد؛ و قد يكون غير حقيقي؛ و قد يكون بالاتصال، و هو الذي ينقسم
بالقوة الى اجزاء متشابه كالماء؛ و قد يكون بالتركيب، و هو الذي له
كثيرة بالفعل كالبيت؛ و قد يكون حقيقيا، و هو الذي لا ينقسم اصلا. و
اما الكثير فهو الذي يقابل الواحد.

هداية. الاثنان قد يتقابلان، و هما اللذان لا يجتمعان في شئ

واحد من جهة واحدة. و اقسامه اربعة. احدها الضدان، و هما الموجودان غير المتضائفين كالسواد و البياض و ثانيها المتضائفان، و هما الموجودان تعقل كل واحد منهما بالنسبة الى الآخر كالأبوة و البنوة.

و ثالثها المتقابلان بالعدم و الملكة، و هما امر ان يكون احدهما وجوديا و الآخر عدميا لكن يعتبر فيهما موضوع قابل لذلك الموجود كاليصر و العمي و العلم و الجهل. و رابعها المتقابلان بالسلب و الايجاب كالفرسية و اللافرسية، و ذلك في الضمير لا في الوجود العيني

فصل في المتقدم و المتأخر. اما المتقدم فيقال على خمسة

اشياء. احدها المتقدم بالزمان، و هو ظاهر. و الثاني المتقدم بالطبع و هو الذي لا يمكن ان يوجد الآخر الا و هو موجود معه. و قد يمكن ان يوجد ليس الآخر بموجود، كتقدم الواحد على الاثنين. و الثالث المتقدم بالشرف لتقدم ابي بكر على عمر رضي الله تعالى عنهما. الرابع المتقدم بالرتبة و هو ما كان اقرب من مبدأ محدود كترتب الصفوف في المسجد منسوبة الى المحراب، و الخامس المتقدم بالعلية كتقدم حركة اليد على حركة القلم. و اما المتأخر فيقال على ما يقابل المتقدم.

فصل في القديم و الحادث. القديم بالذات هو الذي لا يكون

وجوده من غيره. و القديم بالزمان هو الذي لا اول لزمانه. و الحادث بالذات هو الذي يكون وجوده من غيره و الحادث بالزمان هو الذي لزمانه ابتداء.

و قد كان وقت لم يكن هو فيه موجودا، ثم انقضى ذلك الوقت، و جاء وقت صار هو فيه موجودا. و كل حادث زمني، فهو مسبوق بمادة و

مدة لان امكان وجوده سابق على وجوده و الا لما كان قبله ممكنا، ثم صار ممكنا. فيلزم انقلاب الشئ من الامتناع الذاتي الى الامكان الذاتي هذا خلف و ذلك الامكان امر وجودي اذ لا فرق بين قولنا امكانه لا، و بين قولنا لا امكان له. فلو كان عدميا لم يكن الممكن ممكنا. هذا خلف.

و الامكان اما ان يكون قائما بنفسه او لا لا جائز ان يكون قائما بنفسه لان امكان الوجود انما هو بالاضافة الى ما هو امكان الوجود له، فلا يكون قائما بنفسه. فيكون قائما بمحل، و هو المادة.

فصل في القوة و الفعل. القوة هي الشئ الذي هو مبدأ

التغير في آخر من حيث هو آخر. و كل ما يصدر عن الاجسام في العادة المستمرة المحسوسة من الآثار و الافعال كالاختصاص بآين، و كيف، و حركة، و سكون. فهي صادرة عن قوة موجودة فيه لان ذلك اما ان يكون لكونه جسما، او لامور اتفافية، او لقوة موجودة فيه. و الاول باطل و الا لاشتراك الاجسام فيه. و الثاني ايضا باطل و الا لما كان ذلك مستمرا او لا اكثر يا لان الامور الاتفافية لا تكون دائمة و لا اكثرية. فاذن هو عن قوة موجودة فيه، و هو المطلوب.

فصل في العلة و المعلول العلة تقال لكل ما له وجود في

نفسه، ثم يحصل من وجوده وجود غيره. و هي اربعة اقسام. مادية، و صورية، و فاعلية، و غائية. المادية فهي التي تكون جزء من المعلول لكن لا يحجب بها ان يكون موجودا بالفعل، كالطين للكون. و اما العلة الصورية فهي تكون جزء من المعلول لكن يحجب بها ان يكون المعلول موجودا

بالفعل، كالصورة للكوز

و اما الفاعلية فهي التي يكون منها وجود المعلول، كالفاعل للكوز. و اما الغائية فهي التي لأجلها وجود المعلول، كالغرض المطلوب من الكوز. ثم العلة الفاعلية، متى كانت بسيطة، استحال ان يصدر عنها اكثر من الواحد لان ما يصدر عنه اثران . فهو مركب لان كون الشئ بحيث يصدر عنه هذا الاثر، غير كونه بحيث يصدر عنه ذلك الاثر. فمجموع هذين المفهومين، او احدهما، ان كان داخلا في ذات المصدر، لزم التركيب في ذاته؛ و ان كانا خارجين كان مصدرا لهما. فكونه مصدرا لهذا غير كونه مصدرا لذلك، فينتهي لا محالة الى ما يوجب التركيب و الكثرة في الذات.

و نقول ايضا ان المعلول يجب وجوده عند وجود علته التامة، اعني عند تحقق جملة الامور المعتبرة في تحققه لانه لو لم يكن واجب الوجود حينئذ فاما ان يكون ممتنع الوجود، و هو محال و الا لما وجد او ممكن الوجود، فبححتاج الى مرجح يخرج من القوة الى الفعل فلا يكون جملة الامور المعتبرة في وجوده حاصلة، و قد فرضناها حاصلة هذا خلف. فبان ان المعلول يجب وجوده عند تحقق العلة التامة. فيكون واجبا لغيره ممكنا بالذات، لانا لو اعتبرنا ماهيته من حيث هي هي لا يجب لها الوجود و لا العدم.

هداية كون الشئ موجودا لا ينافي تأثير العلة فيه، لان

الشئ اذا كان معدوما ثم يوجد، فاما ان توصف العلة بكونها مفيدة لوجوده حالة العدم، او حالة الوجود، او في الحالتين جميعا. لا جائز ان

تفيد وجوده حالة العدم او في الحالتين جميعا و الا لزم اجتماع الوجود و العدم. هذا خلف فاذن تفيد وجوده حالة وجودة المفاد، فكون الشئ موجودا لا ينافي كونه معلولا.

فصل في الجوهر و العرض كل موجود فاما ان يكون مختصا

بشئ ماديا فيه، او لا يكون. فاذا كان الواقع هو القسم الاول يسمى الساري حالا، و المسرى فيه محلا. و لا بد ان يكون لاحدهما حاجة الى صاحبه و الا لامتنع ذلك الطول. فلا يخلو اما ان يكون المحل محتاجا الى الحال. فيسمى المحل الهیولی، و الحال الصورة، او بالعكس فيسمى المحل موضوعا، و الحال عرضا. و اذا ثبت هذا فيقول الجوهر هو الماهية التي اذا وجدت في الاعيان كانت لا في موضوع، و حينئذ يخرج منه واجب الوجود اذ ليس له وراء الوجود ماهية.

و اما العرض فهو الموجود في موضوع. ثم الجوهر ان كان محلا، فهو الهیولی. و ان كان حالا فهو الصورة. و ان لم يكن حالا و لا محلا، فان كان مركبا منهما فهو الجسم. و ان لم يكن كذلك، فان كان متعلقا بالاجسام تعلق التدبير و التصرف فهو النفس و الا فهو العقل.

و الجوهر هو ليس جنسا لهذه الانقسام الخمسة، اذ لو كان جنسا لكان ما يدخل تحته مركبا من جنس و فصل، و ليس كذلك لان النفس ليست مركبة منها لانها تعقل الماهية البسيطة. فلا تكون مركبة و الا لزم انقسام الماهية البسيطة فيها. هذا خلف.

و اما اقسام العرض فتسعة الكم، و کیف، و الأیّن، و المتی، و الاضافة، و الملك، و الوضع، و الفعل، و الانفعال اما الكم، فهو الذي يقبل

المساواة و اللامساواة لذاته. و ينقسم الى منفصل كالعدد؛ و الى متصل
قار الذات، و هو المقدار كالخط، و السطح، و الثخن؛ و الى متصل غير
قار الذات، و هو الزمان.

و اما الكيف، فهو الهيئة في شئ لا تقتضي لذاته قسمة، و لا
نسبة. و ينقسم الى كيفيات محسوسة راسخة كحلاوة العسل و ملوحة
ماء البحر؛ و غير راسخة كحمرة الخجل و صفرة الوجل؛ و الى كيفيات
نفسانية، و هي حالات كالكتابة في ابتداء الخلقة، و ملكات كالكتابة بعد
الرسوخ و العلم و غير ذلك؛ و الى كيفيات استيعادية نحو الدفع
كالصلابة، و نحو الانفعال كاللين؛ و الى كيفيات مختصة بالكميات
كالثلثية، و المربعة، و الزوجية، و الفردية

و اما الأين، فهو حالة تحصل للشئ بسبب حصوله في المكان. و
اما المتى، فهو حالة تحصل للشئ بسبب حصوله في الزمان. و اما
الاضافة، فهو حالة نسبية متكررة. و اما الملك، فهو حالة تحصل للشئ
بسبب ما يحيط به، و ينتقل بانتقاله لكون الانسان متعمما و متقمصا.

و اما الوضع، فهو هيئة حاصلة للشئ بسبب نسبة اجزائه بعضها
الى البعض، و بسبب نسبتها الى الامور الخارجية كالقيام و القعود.

و اما الفعل، فهو حالة تحصل للشئ بسبب تأثيره في غيره
كالقاطع ما دام يقطع. و اما الانفعال، فهو هيئة تحصل للشئ بسبب تأثره
عن غيره كالمسخن ما دام يتسخن

الفن الثاني في العلم بالطبع و صفاته، و هومشتمل على

عشرة فصول.

فصل في اثبات الواجب لذاته و هو الذي اذا اعتبر من حيث

هو هو. لا يكون قابلا للعدم و برهانه، ان نقول ان لم يكن في الوجود موجود واجب لذاته، يلزم منه المحال لان الموجودات باسرها حينئذ تكون جملة مركبة من آحاد كل واحد منها ممكن لذاته. فتحتاج الى علة خارجية، و العلم به بديهي. و الموجود الخارج عن جميع الممكنات واجب لذاته، فيلزم وجود واجب الوجود على تقدير عدمه، و هو محال فوجوده واجب.

فصل في ان وجود واجب الوجود نفس حقيقته. لان وجوده لو

كان زائدا على حقيقته لكان عارضا لها و ان كان عارضا لها كان الوجود من حيث هو هو مفتقرا الى الغير، فيكون ممكنا لذاته، فلا بد له من مؤثر. و ذلك المؤثر ان كان نفس تلك الحقيقة، يلزم ان تكون موجودة قبل الوجود لان العلة الموجدة للشيء يجب تقدمها على المعلول بالوجود. فيكون الشيء موجودا قبل نفسه. هذا خلف. و ان كان غير تلك الماهية، يلزم ان يكون الواجب لذاته محتاجا الى الغير في الوجود، و هذا محال.

فصل في ان وجوب الوجود و تعيينه عين ذاته. اما الاول فان

وجوب الوجود لو كان زائدا على حقيقته لكان معلولا لذاته و العلة ما لم يجب وجودها استحالة ان توجد المعلول. و ذلك الوجوب هو الوجوب بالذات ضرورة. فيكون وجوب الوجود قبل نفسه، و هو محال

و اما الثاني، فلان تعيينه لو كان زائدا على حقيقته لكان معلولا لذاته. و العلة ما لم تكن متعينة لا توجد. فيكون التعيين حاصلا قبل نفسه، و هو محال.

فصل في توحيد واجب الوجود. لانا لو فرضنا موجودين

واجبي الوجود لكانا مشتركين في وجوب الوجود متمايزين بامر من الامور. و ما به الامتياز اما ان يكون تمام الحقيقة، او لا يكون. لا سبيل الى الاول لان الامتياز لو كان تمام الحقيقة لكان وجوب الوجود لاشتراكه خارجا عن حقيقة كل واحد منها، و هو محال لما بينا ان وجوب الوجود نفس حقيقة واجب الوجود. و لا سبيل الى الثاني لان كل واحد منها يكون مركبا مما به الاشتراك، و مما به الامتياز. و كل مركب محتاج الى غيره، فيكون ممكنا لذاته. هذا خلف.

فصل في ان الواجب لذاته واجب من جميع جهاته، اي ليس له

حالة منتظرة. لان ذاته كافية فيما له من الصفات، لانها لو لم تكن كافية لكان شئ من صفاته من غيره. فيكون حضور ذلك الغير علة في الجملة لوجود تلك الصفة، و غيبته علة لعدمها. و لو كان كذلك، لم يكن ذاته اذا اعتبرت من حيث هي بلا شرط ان يجب لها الوجود لانها اما ان يجب مع وجود تلك الصفة، او مع عدمها. فان الوجوب مع وجود تلك الصفة لم يكن وجودها من غيره. و ان كان مع عدمها لم يكن عدمها من غيبته و اذا لم يجب وجودها بلا شرط لم يكن الواجب واجبا لذاته. هذا خلف.

فصل في ان الواجب لذاته لا يشاركه الممكنات في وجوده.

لان ه لو كان مشاركا للممكنات في وجوده، فالوجود المطلق من حيث هو هو اما ان يجب له التجرد، او اللاتجرد، او لا يجب شئ منهما. فان وجب له التجرد وجب ان يكون وجود الممكنات باسرها مجردا غير عارض

للماهيات، و هو محال لانا نعقل المسبوع مع الشك في وجوده الخارجي فلو كان وجوده نفس حقيقته لكان الشئ الواحد معلوما و مشكوكا في حالة واحدة، و هو محال.

و ان وجب له اللاتجرد لما كان وجود الباري تعالى مجردا. هذا خلف. و ان لم يجب له شئ منهما كان كل واحد منهما ممكنا له، فيكون معلولا لعلّة. فيلزم افتقار واجب الوجود في تجرده الى غيره، فلا تكون ذاته كافية فيما له من الصفات. هذا خلف.

فصل في ان الواجب لذاته عالم بذاته. لانه مجرد عن المادة، و كل مجرد عن المادة مدرك. فهو عالم بذاته لان ذاته حاصلة عنده. فيكون عالما بذاته لان العلم هو حصول حقيقة الشئ مجردة عن المادة و لواحقها عند المدرك. فالباري عالم بذاته.

هداية . تعقل الشئ لذاته لا يقتضي التغاير بين العاقل و المعقول لان العلم هو حضور حقيقة الشئ مجردة. و هذا اعم من حضور حقيقة الشئ المتغاير. و لا يلزم من كذب الاخص كذب الاعم، و لان كل واحد من الناس يعقل ذاته بذاته و الا لكان له نفسان، احديهما عاقلة و الاخرى معقولة. هذا خلف.

فصل في ان الواجب لذاته عالم بالكليات. لانه مجرد عن المادة و لواحقها. و كل مجرد عن المادة و لواحقها يجب ان يكون عالما بالكليات. اما الصغرى فقد مر ذكرها و اما الكبرى فلان كل مجرد يمكن بالامكان العام ان يعقل، و هذا بديهي لا خفاء فيه. و كل ما يمكن ان يعقل وحده

يمكن ان يعقل مع كل واحد من المعقولات لا محالة فيمكن ان يقارنه سائر المعقولات في النفس.

فان الادراك و التعقل هو حضور صورة المعقول في العقل مجردة عن المادة و لواحقها. و كل ما يمكن ان يقارنه سائر المعقولات في العقل يمكن ان يقارنه سائر المعقولات لذاته و كل ما يمكن لواجب الوجود بالامكان العام يجب وجوده له و الا لكان له حالة منتظرة. هذا خلف. فان قيل لو كان الباري تعالى عالما بشئ لكان فاعلا لتلك الصورة و قابلا لها، و هو محال لان القابل هو الذي يستعد للشئ و الفاعل هو الذي يفعل الشئ.

و الاول غير الثاني، فيلزم التركيب. قلنا لما لا يجوز ان يكون الشئ الواحد مستعدا للشئ التصوري و مفيدا له، و هذا لان معنى كونه مستعدا للشئ انه لا يمتنع لذاته ان يتصوره، و معنى كونه فاعلا انه مقدم بالعلية على ذلك التصور. فلم قلت انهما متنافيان، و من اعتقد ان علمه تعالى بالاشياء نفس ذاته اعتقد نفي العلم بالحقيقة

فصل في ان الواجب لذاته عالم بالجزئيات المتغيرة على وجه

كلي. لانه يعلم اسبابها عالما تاما فوجب ان يكون عالما بها لان من يعلم العلة عالما تاما وجب ان يعلم ما يلزم عنها لذاتها و الا لما كان عالما بها لكن لا يدركها مع تغيرها و الا لكان يدرك منها تارة انها موجودة غير معدومة، و تارة يدرك انها معدومة غير موجودة. فيكون لكل واحدة منهما صورة عقلية على حدة و واحدة من الصورتين لا تبقي مع الثانية، فيكون واجب الوجود متغير الذات هذا خلف.

بل يدرك على وجه كلي كما تعلم الكسوف الجزئي بعينه بانك تقول فيه انه كسوف يكون بعد حركة كوكب كذا من كذا شماليا بصفة كذا. و هكذا الى جميع العوارض، لكنك ما علمته جزئيا لان ما علمته لا يمنع الحمل على كثيرين. و هذا العلم الكلي غير كاف للعلم وجود ذلك الكسوف المشخص في ذلك الوقت ما لم ينضم اليه المشاهدة. و لما لم يكن الحاصل في علم الله تعالى سوى ما ذكرنا، لم يعلم الجزئيات الاعلى وجه كلي.

فصل في ان الواجب مريد الاشياء و جواد. اما ارادته فلان كل ما هو معلوم عند المبدء و هو غير مناف لماهية، فائض عن ذات المبدء، و كماله المقتضي لفيضاته. فذلك الشئ مرضى له، و هذا هو الارادة. و اما الجوده فنقول الواجب لذاته اما ان يفعل بقصد و شوق الى كمال، او يفعل لانه نظام الخير في الوجود، فيوجد الاشياء على ما ينبغي لا لغرض و شوق. و الاول محال اما بينا ان واجب الوجود ليس له كمال منتظر. و القسم الثاني حق، فهو الجواد.

الفن الثالث في الملائكة، و هي العقول المجردة. و هو يستعمل على اربعة فصول.

فصل في اثبات العقل و برهانه ان الصادر من المبدء الاول انما هو الواحد لانه بسيط. و البسيط لا يصدر عنه الا الواحد كما مر و ذلك الواحد اما ان يكون هيولى، او صورة، او عرضا، او نفسا، او عقلا. لا جائز ان يكون هو الهيولى لانها لا تقوم بالفعل بدون الصورة. و لا جائز ان يكون صورة لانها لا تتقدم بالعلية على الهيولى كما مر. و لا جائز ان

يكون عرضا لاستحالة وجوده قبل وجود الجوهر. و لا جائز ان يكون نفسا
و الا لكان فاعلا قبل وجود الجسم، و هو محال اذ النفس هي التي تفعل
بواسطة الاجسام فتعين ان يكون عقلا، و هو المطلوب.

فصل في اثبات كثرة العقول و برهانه المؤثر في الافلاك اما

ان يكون عقلا واحدا، او فلكا واحدا، او عقلا متعددة. لا جائز ان يكون عقلا
واحدا لاستحالة صدور جميع الافلاك عن عقل واحد لما بينا ان الواحد لا
يصدر عنه الا الواحد. و لا سبيل الى الثاني لان الفلك لو كان علة لفلك
آخر فاما ان يكون الحاوي علة لوجود المحوى، او على العكس لا سبيل الى
الثاني لانه اخر و اصغر. و الاخر الاصغر استحالة ان يكون سببا
للاشرف الاعظم.

و لا جائز ان يكون الحاوي علة لوجود المحوى لانه لو كان كذلك
لكان وجوب وجود المعلول مؤخرا عن وجوب وجود الحاوي لان وجوب
وجود المعلول مؤخر عن وجوب وجود العلة. و اذا كان كذلك فعدم المحوى
مع وجود الحاوي لا يكون ممتمنا لذاته و الا لكان وجوده معه لا متأخرا
عنه، و قد فرضناه متأخرا. هذا خلف. و اذا كان عدم المحوى مع وجود
الحاوي ممكنا كان وجود الخلاء ممكنا لذاته. هذا خلف. فظهر ان المؤثر في
الافلاك عقول متعددة.

هداية - الحاوي و سبب المحوى و هو العقل الثاني معا. ان

السبب متقدم على المحوى و لكن الحاوي ليس بمتقدم لان السبب متقدم
بالعلية. و ما مع المتقدم بالعلية لا يجب ان يكون متقدما بالعلية.

هداية . الحاوي و المصى كل واحد منهما ممكن لذاته، و لكن

ذلك لا يقتضي الخلاء لان الخلاء لا يلزم من ذلك و انما يلزم من اجتماع وجود الحاوي و عدم المصى ذلك غير ممكن.

فصل في ازالة العقول و ابديتها. اما كونها ازلية فلوجوه

احدها ان واجب الوجود مستجمع لجملة ما لا يد منه في تأثيره في معلوله و الا لكان له تعالى حالة منتظرة. هذا خلف. و العقول ايضا مستلزمة لجملة ما لا يد منه في تأثير بعضها في بعض لان كل ما يمكن لها فهو حاصل لها بالفعل و الا لكان شئ منها حادثا. و كل حادث مسبوق بمادة، فتكون هي مادية. هذا خلف.

و يلزم من هذا ازليتها لان المعلول يجب وجوده عند وجود علة التامة. و اما كونها ابدية فلانه لو انعدم شئ منها لانعدم امر من الامور المعبرة في وجوده، فيكون الباري تعالى و شئ من العقول قابلا للتغير و الحوادث. هذا خلف.

فصل في كيفية توسط العقول بين الباري تعالى و بين العالم

الجسماني. قد مر ان واجب الوجود واحد، و معلوله الاول هو العقل المحض. و الافلاك معلولات للعقول لكن الافلاك فيها كثرة، فيكون مبادئها كثرة لما بينا ان الواحد لا يصدر عنه الا الواحد. و العقل الاول الذي يصدر عنه الفلك الاعظم فيه كثرة لكن لا باعتبار صدور صدوره عن واجب الوجود، بل باعتبار ان له ماهية ممكنة الوجود لذاتها واجبة الوجود لعلتها. فيلزمه وجوب الوجود بالغير و امكان الوجود لذاته. فيكون باحد

هذين الاعتبارين مبدء للعقل الثاني، و بالاعتبار الآخر مبدء للفلك الاعظم.

و المعلول الاشرف يجب ان يكون تابعا للجهة التي هي اشرف الجهات في العقل. فيكون بما هو موجود واجب الوجود بالغير مبدء للعقل الثاني، و بما هو موجود ممكن الوجود لذاته مبدء للفلك الاعظم.

و بهذا الطريق يصدر عن كل عقل، عقل و فلك و كذلك الى ان ينتهي الى العقل التاسع. فيصدر عنه فلك القمر و عقل عاشر، و هو مبدء الفياض المدبر لما تحت فلك القمر، و هو العقل الفعال. فيصدر عنه الهيولى العنصرية و الصورة النوعية المختلفة بشرط استعداد الهيولى العنصرية و ليس استعداد الهيولى لقبول الصورة من جهة العقل المفارق، و الا لما تغير الاستعداد بل استعدادها بسبب الحركات السماوية.

و كل حادث مسبوق بشرط سبق حادث لان الحركات المحدثه اما ان توجد دائما، او بعد حدوث حادث آخر. لا سبيل الى الاول و الا لزم دوام الحوادث، فهذه الحوادث اما ان توجد على سبيل الاجتماع، او على التعاقب. لا سبيل الى الاول و الا لزم اجتماع امور لها ترتب في الوجود بلا نهاية، و هو محال. فقبل كل حركة، حركة، و قبل كل حادث، حادث لا الى اول.

فان قيل لم قلتم انه يستحيل ترتب امور غير متناهية قلنا، لانا اذا اخذنا جملتين احدهما من مبدء معين الى غير النهاية، و اخرى مما قبله بمرتبة واحدة، و اطبقنا الثانية على اول بان يقابل الجزء الاول من الجملة الثانية بالجزء الاول من الاولى، و الثاني بالثاني و هلم جرا، فاما ان تتطابقا الى غير النهاية او تنقطع الثانية.

لا سبيل الى الاول و الا لكان الزائد مثل الناقص في عدد الاحاد.
هذا خلف. فيلزم الانقطاع، فتكون الجملة الثانية متناهية. و الاولى زائدة
عليها بعدد متناه، و الزائد على المتناهي بعدد متناه يجب ان يكون
متناهيا.

خاتمة . في احوال النشأة الخرى.

هداية . النفس بعد خراب البدن اما ان تفسد، او تتعلق ببدن
آخر على سبيل التناسخ، او تبقى موجودة بلا تعلق.
لا سبيل الى الاول اذ النفس لا تقبل الفساد و الا لكان فيها شئ
يقبل الفساد و شئ يفسد بالفعل لان الفاسد بالفعل غير القابل للفساد،
فتكون مركبة. هذا خلف.
و لا سبيل الى الثاني لان النفوس حادثة مع حدوث الابدان.
فيكون التناسخ محالا و لان البدن الصالح للنفس كاف في فيضان النفس
عن مبدئها. فكل بدن يصلح ان يتعلق به نفس، فلو تعلق به نفس اخرى
على سبيل التناسخ تعلق بالبدن الواحد نفسان مدبرتان، و هو محال اذ
لا يشعر كل واحد من العقلاء من ذاته الا نفسا واحدة. فظهر القول ببقاء
النفس بعد الموت بلا تعلق.

هداية اللذة ادراك الملائم من حيث هو ملائم كالحلو عند
الذوق، و النور عند البصر. و الملائم للنفس الناطقة انما هو ادراك
المعقولات بان تتمكن من تصور قدر ما يمكن ان يتبين من الحق الاول، و
انه واجب الوجود لذاته في جميع جهاته، بري عن النقائص، منبع

لفيضان الخير على ال،جه الاصوب.

ثم ادراك ما يترتب عليه بعده من العقول المجردة، و النفوس
الفلكية، و الاجرام السماوية، و الكائنات العنصرية حتى تصوير النفس
بحيث يرتسم فيها جميع صور الموجودات على الترتيب الذي هو لها. و
هذا الادراك حاصل لها بعد الموت

و انما قلنا ان هذا الادراك حاصل لها بعد الموت لان النفس لا
تحتاج في تعلقاتها الى الآلة الجسدانية. فيكون تعلقاتها حاصلة بعد الموت،
و عدم حصولها حالة تعلق النفس بالبدن. انما كان لقيام المانع و هو
التعلقات البدنية و العلائق الجسمانية.

هداية الالم ادراك المناقي من حيث هو مناف و المنفي

لنفس الناطقة انما هو الهيئة المتضادة للكمال. فالنفس اذا فارقت البدن
و تمكنت فيها **الهيئات** المتضادة للكمال ادركت فيعرض لها الالم العقلي.

هداية . النفس الكاملة بتصورات حقائق الاشياء و

بالاعتقادات البرهانية اذا حصل لها التنزه عن العلائق الجسمانية اتصلت
بالعالم القدسي في حضرة جلال رب العالمين فِي مَقْعَدٍ صِدْقٍ عِنْدَ مَلِيكَ
مُقْتَدِرٍ. فان لم يحصل لها التنزه عن العلائق الجسمانية بل يبغي فيها
الهيآت البدنية تصوير محجوبة عن الانصال بالسعادة، فتتاذي بها اذي
عظيما. لكن ليس هذا الامور لازما بل امر عارض غير لازم، فيزول الالم
الذي كان لأجله.

هداية . النفوس الناطقة الساذجة اذا ظهر لها ان من شأنها

ادراك الحقائق بكسب المجهول من المعلوم لزم لها من هذا الكسب شوق الى كمال. فاذا فارقت البدن و ليس معها بسبب الكمال و آله يعرض لها الالم العظيم. و هو الم النار الروحانية الموقدة التي تطلع على الأفئدة

هداية . النفوس الناطقة التي لم تكتسب العلم و الشرف، و

لا تشتاق ايضا اليه، اذا فارقت البدن و كانت خالية عن الهيآت البدنية الردية حصل لها النجاة من العذاب و الخلاص من الالم، فكانت البلاهة ادنى الى الخلاص من فطانة بتراء. و اما اذا لم تكن خالية عن الهيآت البدنية فتألم بفقدان البدن و تبقي في كدر الهوى مقيدة بسلاسل العلائق، فتكون في غصة و عذاب اليم. و من اراد الاستقصاء في الحكمة و الوقوف على مذهب الحكماء، فليرجع الى كتابنا المسمى بزبدة الاسرار فقط.

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